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PREFATORY NOTE.

With the present volume the first group of Indian Invertebrata included in the present Series is completed. Of the remaining Lepidoptera, the Butterflies are being fully described elsewhere, whilst the Tineas, Tortrices, and a few other lowly organized forms are not sufficiently known for a general description to be practicable at present. The magnitude of the work is shown by the fact that the four volumes of Moths, with the Appendix to the last volume, contain descriptions of 5618 species regarded as valid, exclusive of races or subspecies.

The number of Indian Insects and other-Invertebrata is so large, and that of students and collectors of the majority of the groups so small, that it is very difficult to deal with most of the orders. I am therefore fortunate in being able to announce that the next volume (to be published, it is hoped, early in 1897) will commence the description of the Hymenoptera, and contain the Bees and Wasps by Col. C. T. Bingham.

W. T. BLANFORD.

October 1896.

PREFACE.

THE Fourth Volume of the Moths in the 'Fauna of British India' deals with the subfamilies, genera, and species of Indian Pyralida.

In the lowest subfamily, the Pyraustina, the least specialized form is Simethistis tricolor, with vein 5 of each wing from the middle of the discocellulars, all the subcostals of the fore wing from the cell, vein 8 of the hind wing free, and the palpi porrect with the 3rd joint naked—a combination of generalized characters which would almost allow this species to be regarded as the ancestor of the whole family. Almost all other Pyralidæ have veins 8 and 9 of the fore wing stalked. From Simathistis the Pyraustina diverge in two directions—firstly, to forms with porrect triangularly scaled palpi, the 3rd joint concealed, from low down in which series originated the Scoparina, with raised tufts of scales on the fore wing; and, secondly, to forms with upturned palpi, the 3rd joint long and acuminate. From the lower Pyraustinæ, with porrect palpi and the 3rd joint naked, arose also the other groups of Pyrahdæ:-

The Hydrocampinæ with vein 10 of the fore wing stalked with 8 and 9:

The Pyralnæ, with vein 7 stalked with 8 and 9, and vein 8 of the hind wing free; giving rise to (a) the Endotrichinæ, with vein 8 of the hind wing anastomosing with 7, from which arose the Chrysauginæ, with the maxillary palpi absent; and (b) the Epipaschinæ, with raised tufts of scales on the fore wing and vein 8 of the hind wing either free or anastomosing with 7, giving rise to the Phycitinæ, with vein 7

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of the fore wing absent and the median nervure of the hind wing pectinate above: from these again spring the *Anerastinae*, with the proboscis absent

The Schenobune, with the proboscis absent

And the *Crambinæ*, with the median nervure of the hind wing pectinate above, and the maxillary palpi triangularly dilated with scales; from this subfamily were developed the *Gallerinæ*, with the maxillary palpi filiform or very slightly dilated (See Phylogeny, p. 1.)

The Appendix contains the additions made to the list of Indian species since the volumes dealing with the families to which they belong were published, and is complete up to date, with the exception of a few species of Geometride and Pyralida described by Mr. Warren, in the 'Annals and Magazine of Natural History' and the 'Novitates Zoologicæ,' too late to be included . these will be dealt with in the first of a series of supplementary papers which I hope to publish annually in the Proceedings of one of the Scientific Societies, so as to keep pace with the development of the subject. There will also be found in the Appendix a number of corrections which I have been enabled to make whilst working at the fresh material sent to me from time to time. All criticisms published or made to me personally have been carefully considered, and where acceptable the alterations suggested are adopted I have also corrected, where necessary, the position assigned to species described by Mr. Moore in the Atkinson collection, as, by the kindness of Dr. Staudinger, I have had the opportunity of seeing the types of the species with which I was unacquainted, and there now remain but very few described Indian species which I have not examined

The publication of the present volume brings to a conclusion the whole of the original scheme for the work on Indian Moths, with the addition of the Pyralid subfamilies Gallerina, Crambina, Schanobina, Anerastina, and Phycitina, leaving only the Tortrices, Tineas, and Plumes for future study.

The Council of the Zoological Society have kindly allowed me the use of figures 10, 11, and 13 to 33, which appeared in a paper in the 'Proceedings' for 1895 on the classification of the Schænobiinæ and Crambinæ; and the Council of the Entomological Society have lent me figures 241, 243, 244, 248, 251, 253, 254, 259, 262, 268, 270, 272, 274, 279, 282, and 287, which appeared in their 'Transactions' for 1895.

I have again to thank all those who have so kindly assisted me during the progress of the work—both the Collectors in India, who have liberally supplied me with specimens and information, and the owners of Collections in England, who have put the whole of their material freely at my disposal. The names of most of those who have aided me have been mentioned in the prefaces to the other three volumes, and I have also to express my thanks to Surg.-Col. J. G. Pilcher in Sikhim and Mr. J. Pole in Ceylon, who have sent to me valuable collections during the last two years.

G. F. HAMPSON.

October 15th, 1896.

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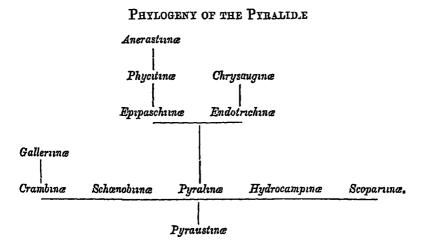
Family PYRALIDÆ.

Proboscis and maxillary palpi usually developed Fore wing with vein 1a usually free, sometimes forming a fork with 1b, 1c absent, 5 from near lower angle of cell, 8, 9 almost always



Fig 1 -- Larva and Pupa of Filodes fulvidorsalis

stalked Hind wing with vein 5 usually from near lower angle of cell, 8 approximated to 7 or anastomosing with it beyond the end of cell, 1 a, b, c present; frenulum developed.



Moths usually of slender build, with long thin legs Larva elongate, with five pairs of prolegs Pupa with segments 9-11, sometimes also 8 and 12, movable, not protruding from cocoon on emergence.

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Key to the Subfamilies.

A Hind wing with the median nervure pectinated on upperside		
a Fore wing with vein 7 present.		
a' Maxillary palpi not triangularly	_	A
scaled		Gallerunæ.
b' Maxillary palpi triangularly scaled .	2	Crambinæ.
b Fore wing with vein 7 absent		
		Anerastunæ.
b' Proboscis present	5.	Phycitina.
B. Hind wing with the median nervure not		•
pectinated on upperside †.		
a Proboscis absent	3	Schænobunæ
b Proboscis present ‡	•	
a' Fore wing with vein 7 stalked with		
8, 9		
a ² Fore wing with tufts of raised		
scales in the cell	6.	Epipaschunæ.
b ² Fore wing with no tufts of raised	••	-production.
scales in the cell		
as Hind wing with vein 8 anasto-		
mosing with 7		CTT
a Maxillary palpi absent		Chrysaugina
bi Maxillary palpi present		Endot: ichinæ.
b ³ Hind wing with vein 8 free	9.	Pyralmæ
b'. Fore wing with vein 7 from the cell.		•
a ² . Fore wing with vein 10 stalked		
with 8, 9 §	10	Hydrocampina.
b2 Fore wing with vein 10 from the		
cell		
a ³ Fore wing with tufts of raised		
scales in the cell	11	Scoparunæ
		~wpm ·me
b ³ Fore wing with no raised tufts		Dunanatana
of scales in the cell	14	Pyraustinæ

^{*} Except in Culladia
† Except in Macaretera
† Except in a few genera of Pyraline, to be distinguished from the Schenobine by rein 8 of the hind wing being free
§ Except in a small percentage of specimens of Nymphula and Oligosigma and a few non-Indian species, to be distinguished from nearly all Pyraustine by their long maxillary paipi dilated at extremity

Subfamily GALLERIINÆ

Proboscis usually well developed; maxillary palpi filiform Fore wing with vein 1 a separate from 1 b, 7 present Hind wing with the median nervure pectinated on upperside; 7 usually anastomosing with 8, the frequium multiple in female

Key to the Genera.

A Fore wing with veins 7, 8 stalked a Hind wing with three veins arising from median nervure a' Hind wing with the cell open, vein 7 anastomosing with 8 to about two-thirds of wing a² Fore wing with vein 10 stalked with 7, 8, 9 1 TRACHYLEPIDIA, p 3 b2 Fore wing with vein 10 from a3 Fore wing with vein 7 arising from 8 after 9 2 Thagora, p 4 b^{1} Fore wing with yein 7 arising from 8 before 9 3 MUCIATLA, p 5 b' Hind wing with the cell closed, vein 7 anastomosing with 8 almost to 4 Achroia, p 6 b Hind wing with four veins arising from median nervure a' Hind wing with the cell openb' Hind wing with the cell closed 5 LAMORIA, p 6 a² Palpi clothed with very long hair, fore wing with the outer margin evenly curved 6 Acara, p 7. b2 Palpi smoothly scaled, fore wing 7 GALLERIA, p 8 with the outer margin angled. B Fore wing with vein 7 arising from cell, hind wing with four veins from median nervure, 7 joined to 8 by an oblique bar, the head with enormous

Genus TRACHYLEPIDIA

8. BALÆNIFRONS p 9

Trachylepidia, Rag Ann Soc Ent Fr 1887, p 260

Type, T. fructicassiella; Rag. Range Syria, Egypt; Punjab

frontal swelling .

Palpi of male minute, of female projecting about the length of head, maxillary pulpi filiform; antennæ of male simple, with a tuft on basal joint, from with a conical tuft. Fore wing with the costa arched, the outer margin nearly straight; vein 3 from before angle of cell, 4 stalked with 5 in female, in male from angle of cell which is produced, 6 from upper angle; 8, 9, 10

given off at intervals from 7, 11 free Male with a large glandular swelling at base of costa below; the cell narrow and clothed with hair. Hind wing with the cell open, vein 4 absent, 7 anastomosing with 8

4142 Trachylepidia fruoticassiella, Rag Ann Soc Ent Fr 1887, p 260

grey-brown Fore wing with the median area darker and



Fig 2
Trachylepidia fructicasmella 4.

clothed with rough erect scales, especially towards costa, indistinct ante- and post-medial lines of raised dark scales, the former oblique and obsolete towards costa, the latter oblique and angled inwards on vein 5, a very indistinct discocellular spot, a

marginal series of specks Hind wing dull brownish yellow

The larva bores in the pods of Cassia fistula.

Hab. Beyrout, Egypt, Punjab. Exp, & 20-27, 2 29-34 millim.

Genus THAGORA

Thagora, Wlk Cat xxvn, p 205 (1863)

Type, T figurana, Wlk.

Range Ceylon, Borneo, Java

Differs from Munalla in vens 8 and 9 being given off at intervals from 7 Male with a fascia of black scales on underside of fore wing in and beyond cell, and a similar subcostal fascia on upperside of hind wing

4143 Thagora castanella, n sp

d Very pale chestnut. Fore wing with curved antemedial



Fig 3
Thagora custanella, 3

line, the area beyond it suffused with rufous, a black discocellular speck, an obliquely curved postmedial line, the fascize on underside of fore wing and upperside of hind wing deep black

Q with the base and costa of fore wing deeper rufous, the rest of the wing pale, the ante- and

postmedial lines and discocciliular speck almost obsolete

Hab Colombo, Ceylon (Pole) Exp, & 18, & 20 millim

Type in B M.

- 4144 Thagora figurana, Will Cat xxvii, p 205, Hmpsn Ill Het ix, pl 157, fig 8, C & S no 511
- Q Head and thorax pale brown, abdomen whitish Fore wing emerald-green, the base and costa brown, an antemedial brown speck below costa and another in cell an oblique series of brown patches from discocellulars to inner margin, postmedial and submarginal minutely dentate brown bands from vein 6 to inner margin, the former excurved between veins 5 and 2; cilia brown Hind wing white, the margin tinged with brown

Hab Ceylon, Java Exp 24 millim

Genus MUCIALLA

Mucialla, Wik Cat xxxv, p 1739 (1866)

Type, M mundella, Wlk, from Borneo Range Bhután, Khásis, Ceylon, Borneo; Sula, New Guinea Differs from Lamoria in vein 4 of the hind wing being absent.

4145 Mucialla rufivena, Wlh. Cat xxx, p 960 Lamoria ruptilinea, Wlh. Cat xxxv, p 1723

Pale brown, vellowish or reddish brown Fore wing with



Fig 4—Mucialla rufivena, o

more or less developed annuli at middle and end of cell connected by a white streak; sometimes with a spot in base of cell also joined by the white streak, the inner margin, vein 1, the interno-median interspace, and veins beyond lower angle

of cell streaked with crimson, a dark marginal line. Hind wing pale fuscous, dull yellow, or orange-yellow

Hab Ceylon, Shan States, Borneo; New Guinea Exp. 26-

30 millim.

4146 Mucialla semifædalis, Wlk Cat xxxiv, p 1439

Q. Head pale, thorax greenish; abdomen yellow. Fore wing olive-green, with black spots in and at end of cell connected by a white mark, a dark marginal line. Hind wing yellow, the apical area greenish, a fine dark marginal line.

Hab Bhután; Sula Eup 28 millim

4147 Mucialla unicolorella, n sp

Q Uniform pale olive-green. Fore wing with few scattered black scales, small raised specks of black scales at middle and end of cell, an indistinct minutely dentate curved postmedial line. Hind wing slightly paler.

d. With the fore wing long, narrow, produced and acute at apex, a rufous speck in cell and another on discocellulais, cilia rufous

Hab Bhután, 2500 ft. (Dudgeon), Khasis. Exp 34 millim Type in B M.

Genus ACHROIA.

Achioia, Hubn Verz p. 163 (?1818)

Type, A gresella, Fabr.

Range. Palearctic, Oriental, and Australian regions

Palpi minute and porrect, maxillary palpi minute, from rounded, antennæ minutely serrate, tibiæ roughly scaled. Fore wing short and rounded, male with a glandular fold fringed with hair at base of costa below, vein 3 from near angle of cell, 4,5 stalked, 6 from below upper angle, 7,8 stalked, 9 stalked with 7,8, from cell, or abnormally absent, 10 from cell, 11 absent Hind wing with the apex acute vein 2 from close to angle of cell, 4 absent, 3,5 stalked, 6,7 stalked, 7 anastomosing with 8 to near apex.

4148 Achroia grisella, Fubr Ent Syst in, pt 2, p 289
Achroia cinereola, Hubn Samml eur Schmett, Bombyces, fig 91
Umform grey-brown, the head yellow



Fig 5 -Achrona grisclla, & }

The larva feeds on the wax in bee-hires

Hab Europe, Calcutta, Australia Eap 18-20 millim

Genus LAMORIA.

Lamoria, Wlh Cat xxvii, p 87 (1863)

Type, L planalis, Wlk

Range Palmarctic, Ethiopian, and Oriental regions.

Palpi of male minute, of temale projecting about the length of head and downcurved at extremity, maxillary palpi filitorm, from with a conical tuft, antennæ simple. Fore wing of male with a large glandular swelling at base of costa below, vein 3 from before angle of cell, veins 4, 5 from angle, which is much produced, 8, 9 stalked from 7, 10, 11 free female with vein 3 from angle of cell, which is not produced, 4,5 stalked. Hind wing with the cell open, veins 2, 3, 4, 5 at regular intervals: 7 anastomosing with 8

4149. Lamoria planalis, Wil. Cat xxvii, p 88, C & S no 4734
Acrobasis imbella, Wil. Cat xxx, p 955.
Melissoblaptes bipunctanus, Moore, Lep. Ceyl in, p 375 (nec
Haw)

Pale brown Fore wing irrorated with fuscous, traces of an irregularly dentate antemedial dark line, a speck, spot, or small

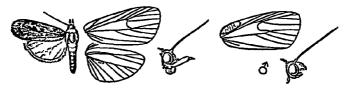


Fig 6—Lamoria planalis, Q 1.

annulus in cell and larger discocellular spot or annulus, a highly dentate, postmedial, more or less prominent line oblique from costa to vein 4, where it is sharply angled, then inwardly oblique, a marginal series of black specks. Hind wing pale brownish

Hab. S Africa, throughout India, Ceylon, and Burma Evp

30-34 millim

4150 Lamoria anella, Schiff Wien Verz p 135, C & S no 4732 Tinea sociella, Hubn Samml eur Schmett, Tin fig 24 (nec Linn) Pempeha adaptella, W lh. Cat xxvii, p 74, C & S no 4631

Head, thorax, and abdomen grey-brown Fore wing grey-brown, often entirely suffused with ied or fuscous, an indistinct highly dentate antemedial line, a more or less developed speck in cell and discocellular spot, a highly dentate postmedial line sharply angled on vein 4 and often reduced to streaks on the veins, a marginal series of specks. Hind wing pale semilyaline, suffused with fuscous towards margin.

Hab Europe, Africa, Afghanistan, Punjab, Poona, Ceylon.

Erp., ♂ 18-28, ♀ 30-40 millim

Genus ACARA.

Acara, Will Cat axvii, p 198 (1863) Ertzica, Will Cat aaxv, p 1768 (1866)

Type, A morosella, Wlk

Range Sylhet, Ceylon, Java

Palpi of male short and upturned, fringed with very long hair in front reaching far in front of head, of female with the 2nd joint oblique, reaching above vertex of head and fringed with very long hair in front, the 3rd long and porrect, maxillary palpi filiform, frons with a long straight tuft of hair, antennæ short and simple, in male with a tuft of hair from basal joint, mid and hind tibiæ fringed with hair. Fore wing with the apex produced and acute; male with a very large glandular fold at base of costa below:

veins 2, 3, 4, 5 given off at regular intervals in male, the lower angle of cell being very much produced, in female less produced and veins 4, 5 from the angle; discocellulars very highly angled, 6 from upper angle, 8 and 9 given off at intervals from 7, 10 and 11 free. Hind wing with the cell short, the discocellulars highly angled and the lower angle produced, vein 3 from angle, 4, 5 shortly stalked, 6, 7 stalked, 8 free.

4151 Acara morosella, Wlk Cat xxvn, pl 199, C & S no 4667. Ertzica maximella, Wlk Cat xxxv, p 1768

Pale red-brown, abdomen suffused with fuscous. Fore wing irrorated with fuscous, traces of an antemedial line, oblique from costa to below median nervure, where it is angled, a dark speck

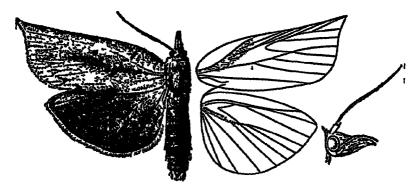


Fig 7—Acara morosella, Q. 1

in end of cell and discocellular speck, an indistinct minutely dentate postmedial line excurved between veins 5 and 2, a marginal series of black specks. Hind wing very dark brown, the ciha grey at tips

Hab. Sylhet, Ceylon, Java. Exp. of 50, 2 56-86 millim.

Genus GALLERIA.

Galleria, Fabr Ent Syst Suppl p 462 (1798).

Type, G mellonella, Lann

Range Neotropical and Palmarche regions, W. India

Palpi of male minute, of female porrect and extending just beyond the sharp frontal tuft, maxillary palpi filiform, antennæ simple, in male with a tuft on basal joint. Fore wing with the costa highly arched, the outer margin excised from apex to vein 2, where it is angled, then very oblique, veins 2, 3, 4 at intervals before angle of cell; 5 from angle; 6 from upper angle, 7, 8 stalked from before angle; 9, 10, 11 free; female with vein 4 from angle of cell, 9 given off from 7, 8. Hind wing with vein

2 from angle of cell, 3 approximated for nearly half its length to 4, 5, which are on a long stalk; 6, 7 from upper angle, which is very much produced, 7 anastomosing slightly with 8

4152 Galleria mellonella, Linn Syst Nat. (ed x), 1, p 537, C & S no 4725 Phalæna cereana, Linn Syst Nat (ed x11), 1, p 874



Fig 8 —Galleria mellonella, o

Head, thorax, and abdomen ochreous brown Fore wing grey, irrorated slightly with black and purple, the inner area ochreous, variegated with purple and black; a ridge of raised rough scales below the cell Hind wing fuscous brown; the base and

inner area paler, or almost wholly pale

The larva is parasitic in bee-hives

Hab Europe, Syria, Poona, West Indies Exp 20-40 millim

Genus BALÆNIFRONS, nov.

Type, B homopteridia, Hmpsn. Range Burma

Head enormously swollen and produced to a large rounded frontal cone, grooved on lower side, the proboscis and filiform maxillary palpi arising from its middle; palpi slender, curved and extending to end of frontal projection, antennæ simple, legs smoothly scaled. Fore wing broad and rounded, vein 3 from before angle of cell, 4, 5 well separated at origin, 7 from upper angle, 8, 9 stalked, 10 free, 11 curved. Hind wing with lower pair to f cell very much produced, vein 3 from before angle, 4, 5 well separated at origin, 6, 7 stalked, 7 well separated from 8 and joined to it by an oblique bar, retinaculum bar-shaped

4153 Balænifrons homopteridia, n sp

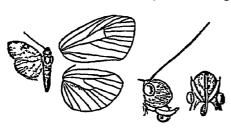


Fig 9—Balænifrons homopteridia, d

o. Head and thorax purplish red and ochreous, abdomen ochreous, with some red and fuscous on dorsum. Fore wing purplish red, irrorated with ochreous; a diffused dusky shade arising from costa at middle diffused over the disk. Hind wing yellowish brown

Another specimen has a broad irregular yellow subbasal band on the fore wing and two postmedial patches on the costa.

Hab Moulmein, Rangoon. Exp 20 millim. Type in BM.

Subfamily CRAMBINÆ.

Proboscis well developed or minute, palpi porrect, the maxillary palpi well developed and dilated with scales at extremity. Fore wing with vein 7 present*, vein 1 a separate from 1 b. Hind wing with the median nervire pectinated on upperside, vein 7 usually anastomosing with 8

The larvæ are usually grass or reed feeders

Key to the Genera.

A. Hind wing with vein 6 from upper angle of cell or stalked with 7 a Palpi haidly reaching beyond the froms, which is produced to a corneous 9 Eschata, p 28 b Palm extending two or three times length of head a' Fore wing with veins 8, 9 stalked, 7 separate a2 Hind wing with your 4, 5 from a point of stalked a3. Frome sounded and not produced 4 PLATITES, p 19. ba Frons with a conical propection at Fore wing with veins 6, 7 6 STRNOCHILO, p 24. stalked b. Fore wing with veins 6, 7 from cell as Palpi about three times length of head, fore wing with the apex produced 8 CHILO, p 26 b⁵ Palpi about twice the length of head, fore wing with the apex rounded, male with a 5 Eromene, p 23 slight foves in the cell b2 Hind wing with veins 4, 5 well separated at origin, fore wing with the outer margin indented 3 DIPTICHOPHORA, p 18 below aper b' Fore wing with veins 7, 8, 9 stalked a2 Both wings with yein 3 absent, fore wing with the outer margin 10 Mesolia, p 80 indented at vein 5

^{*} Except in Culladia

b² Both wings with vein 3 present
a³ Fore wing with vein 10 from the cell
b³ Fore wing with vein 10 staked

with 7, 8, 9

c' Fore wing with vein 7 absent
B Hind wing with vein 6 from below angle
of cell and rudimentary

of cell and rudimentary

a Fore wing with vein 7 from the cell

a' Hind wing with vein 5 present

b' Hind wing with vein 5 absent

b Fore wing with vein 7 stalked with 8, 9

2 Crambus, p 12

7 Macrochilo, p 25. 1 Culladia, p 11.

13 CHARLTONA, p 35

11 Surratha, p 31

12 Ancylolomia, p 33.

Genus CULLADIA.

Culladia, Moore, Lep Ceyl 111, p. 383 (1886)

Type, C admigratella, Wlk

Range Madagascar, China, S India; Ceylon, Borneo.

Palpi porrect, thickly scaled and extending about twice the length of head, maxillary palpi triangularly scaled, from rounded, antennæ of male somewhat thickened and flattened, spurs long and equal. Fore wing long and narrow, vein 3 from angle of cell 6 from below upper angle, 7 absent, 8, 9 stalked, 10, 11 free. Hind wing with vein 3 from near angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

SECT I Both wings with veins 4, 5 stalked

4154 Culladia admigratella, Wlk Cat xxvii, p. 192, C & S no. 4686 Alaxes cæsella, Wlk Cat xxvii, p. 193, C & S no. 4687 Scopula hastiferalis, Wlk Cat xxxiv, p. 1473

Head and thorax white marked with fuscous; palpi banded



Fig 10—Culladia admigratella, o

with fuscous, abdomen pale fuscous. Fore wing white suffused with fuscous, an indistinct postmedial line running out to an angle on vein 5, retracted along vein 2 to below middle of cell, then bent outwards again, the area beyond it whiter, an indistinct highly dentate

submarginal line. Hind wing whitish, the apical area tinged with fuscous

Hab. China, Ceylon, Borneo. Exp. 16 millim.

SECT II Both wings with veins 4, 5 coincident

4155 Culladia suffusella, Hmpsn P Z S 1895, p 925

Head, thorax, and abdomen brownish fuscous Fore wing fuscous, the costal area brownish, the veins beyond lower angle of cell streaked with fuscous, traces of a submarginal series of dark specks, a marginal series of dark specks. Hind wing pale, the costal and apical areas tinged with fuscous

Hab Madagascar, Nilgiris Exp 20-26 millim.

Genus CRAMBUS

Crambus, Fabr Ent Syst Suppl p 464 (1798) Calamotropha, Zell Mon Chil & Cramb p 8 (1863) Myeza, Wik Cat xxvii, p 190 (1863) Epichilo, Rag Ann Soc Ent Fi 1888, p 278

Type, C pascuellus, Lann, from Europe Range. Universally distributed

Palpi porrect, extending about three times the length of head and clothed with long hair, maxillary palpi triangularly scaled, with long hair, from rounded, antennæ of male thickened and flattened, with appressed seriations, tibue with the outer spurs about half the length of inner. Fore wing with the apex acute, vein 3 from before angle of cell, 7, 8, 9 stalked, 10 free. Hind wing with vein 3 from near angle of cell.

SECT I Fore wing with vein 11 curved and approximated to 12, hind wing with veins 4, 5 from angle of cell

A Fore wing with the apex rectangular.

- 4156 Crambus atkinsoni, Zell Mon Chil & Cramb p 9, C & S no 4691
- d. Head and thorax brownish grey Fore wing with the costal and inner areas grey irrorated with fuscous, leaving a golden brown and fuscous streak along median nervure, expanding in the interspaces between veins 3 and 5, a black discocellular spot, traces of a curved submarginal series of dark specks, a marginal series of black specks Hind wing nearly pure white. Abdomen and underside whitish
- 2 with the head, thorax, and fore wing much more uniformly coppery golden brown, irrorated with white scales, the costal area of fore wing darker red-brown, the discocellular spot more prominent, no trace of submarginal dark specks Hind wing pure white

Hab Calcutta, Ceylon; Thayetmyo, Burma, Borneo Exp, 3 28, ♀ 28-34 millim.

4157 Crambus chalcipterus, n sp.

Head, thorax, and abdomen bronze-brown and ochreous, the vertex of head pale Fore wing ochreous white, with bronze-brown fasciæ in and below the cell and on inner area and streaks between the veins of outer area, leaving the costa pale, male with a dark submarginal mark on vein 2. Hind wing pale fuscous, the inner area whitish

Hab Khásis. Exp, & 20, Q 28 millim. Types in coll Rothschild and BM

4158 Crambus delatalis, Wlk Cat xxvii, p. 176

Pale grey-brown; vertex of head whitish Fore wing with the veins and interspaces finely streaked with brown, a black discocellular speck, a marginal series of brown specks. Hind wing fuscous brown

Hab Ceylon, Moreton Bay, Australia Evp., 326, 30 millim

*4159. Crambus parvellus, Rag Ann Soc Ent Fr 1888, p 278, C & S no 4690

Pale ochreous grey irrorated with fuscous, thorax and abdomen ochreous. Fore wing with a few dark scales forming traces of an oblique postmedial line from apex to inner margin beyond middle, the area beyond it greyer. Hind wing white

Hab Trichinopoly Exp 10-13 millim

4160 Crambus anticellus, Wlk Cat xxxv, p 1751

d Head and thorax grey, suffused with coppery brown, abdomen whitish. Fore wing with the costal and inner areas grey irrorated with fuscous, the median area streaked with coppery brown, a black speck at origin of vein 2, a postmedial line excurved from costa to vein 6, then reduced to a series of specks, the interspaces of outer area streaked with white; a marginal series of black specks. Hind wing white slightly tinged with brown

2 with the hind wing pure white

Hab Natal, Travancore, Ceylon; Port Darwin, Australia. Exp 24-26 millim.

4161 Crambus unicolorellus, Zell Mon Chil & Cramb p 7, C & S no 4678

Crambus abbreviatellus, Wlk Cat xxxv, p 1756, C & S no 4692

Crambus luteellus, C & S no 4696 (nec Schiff)

d Head, thorax, and abdomen grey and pale fulvous brown. Fore wing grey suffused with pale fulvous brown, leaving very ill-defined grey fascize below median nervure and on inner margin, the outer area grey, very faint traces of oblique medial and sub-

marginal lines, three black specks on margin below middle, the cilia silvery at that point Hind wing whitish, suffused with very pale fuscous

2. Fore wing with the interspaces uniformly suffused with fuscous, the medial and submarginal lines better marked and dentate from the cell and vein 3 to inner margin. Hind wing pure white.

Hab Dharmsála and Meean Meer, Punjab, Nilgiris Evp 20–28 millim

- 4162 Crambus famulellus, Wik Cat xxxv, p 1765, C & S
- J. Pale reddish brown slightly irrorated with fuscous Fore wing with outwardly oblique rufous line from middle of costs to upper angle of cell, a rufous patch on median nervure at end of cell, an indistinct submarginal rufous line highly angled at vein 6, a marginal series of black spots Hind wing whitish

Hab Ceylon, Rangoon, Tongking Exp 14 millim

- 4163. Crambus dividellus, Snell Trans Ent Soc 1890, p 645, & Tyd v Ent 1893, pl 3, fig 8
- d Head ochreous, thorax rufous, abdomen pale fuscous, the anal tuft ochreous. Fore wing with the costal half ochreous, slightly tinged with rufous, the inner half rufous, with an ochreous streak from base below median nervure and a dark speck below middle of cell, a marginal series of dark specks. Hind wing whitish with a slight fuscous tinge.

Hab. Sikhim. Eap 30 millim.

4164 Crambus punctivenellus, Hmpsn P. Z S 1895, p 934

J. White, palpi fulvous at sides, thorax and abdomen irrorated with brown. Fore wing with the interspaces suffused with brown scales, leaving the base of cell and costal area whitest, a black spot at origin of vein 2, an oblique medial brown striga from costs, an indistinct submarginal brown line, double and very highly angled below costs, a marginal black line somewhat maculate at the veins. Hind wing white

Hab. Ceylon, Tongking. Exp. 20 millim.

4165 Crambus latellus, Snell Trans Ent Soc 1890, p 644, & Tyd v Ent 1893, pl 3, fig 7

Pure white, palpi fulvous yellow at base and black at tip, antennæ yellow, tarsi ringed with fulvous. Fore wing with oblique black streak across origin of vein 2, an oblique orange medial streak from costa and traces of medial line, a submarginal orange line oblique from costa to near margin, then sinuous, a crenulate marginal line enclosing an orange apical spot, and spot with two black specks on it above outer angle, cilia golden

Underside of fore wing suffused with fuscous except marginal area

Hab Japan, Dharmsála, Khásis; Nágas. Exp 20 millim.

4166 Crambus melanostictus, Hmpsn P Z S 1895, p 937

Differs from latellus in the palpi being white at tips. Fore wing with two oblique medial costal brown strigæ continued as a single medial line angled below costa, with a black spot on it at vein 2; the submarginal line brown, further from the margin, double from the costa to its angle at vein 6 and incurved at vein 2; no orange on marginal area; a slight brown marginal line, the cilia silvery.

Hab Nágas, Ceylon. Evp 16-20 millim.

4167. Crambus oculalis, Snell Tijd. v- Ent 1893, p 64, pl 3, fig 6

d White, palpi fulvous at sides except the 3rd joint, abdomen yellowish. Fore wing with the costa brown, with a broad fulvous fascia below it, an indistinct medial brown line oblique and highly angled below costa, then waved and with black specks on it at lower angle of cell and vein 2, a submarginal line double and highly angled below costa, then obsolescent, sinuous, and reduced to specks, the apex white with a large brown spot, three black specks on margin below middle, the cilia silvery. Underside of fore wing suffused with fuscous

Hab Ceylon, Java Exp 18 millim.

4168 Crambus argenticilia, Hmpsn P Z S 1895, p 937

3 Pure silvery white, palpi tinged with fulvous at base. Fore wing with fine pale fuscous, slightly sinuous erect medial line, a similar submarginal line slightly excurved between veins 6 and 3, a black marginal line, cilia silvery.

Hab Bhután, Ceylon. Exp 16 millim

4169 Crambus ænescentellus, *Hmpsn P Z S* 1895, p 933

d Head white, base of palpi and antennæ brown, thorax brown, the patagia white, abdomen white. Fore wing white, an æneous fascia along basal two-thirds of costa and broader fasciæ below median nervure and on inner margin, a fascia in end of cell, then bent upwards to apex, a series of marks in the interspaces beyond lower angle of cell, a marginal line. Hind wing white, the costal area with an æneous tinge.

Q with the fole wing more wholly suffused with bronze Hab Ceylon, E Africa Exp 16 millim

4170. Crambus argyrophorus, Butl Ill Het 11, p 61, pl. 40, fig 5

Head white palpi fuscous at sides, thorax and abdomen fuscous, the former with white dorsal stripe. Fore wing pale

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fuscous, with a broad silvery white fascia with dark line on its lower edge from base widening in end of cell, toothed on base of vein 2, then tapering, the area below it tinged with rufous, a submarginal brown line oblique, angled, and double below costa, the area beyond it whitish with a series of short black strie just inside the margin. Hind wing pale fuscous

Hab Japan, Sikhim Erp. 22-26 millim

4171 Crambus hemileucalis, n sp

Differs from argy ophorus in the abdomen being paler Fore wing with the whole costal half silvery white, leaving a narrow fulvous fascia on basal two-thirds of costa, the inner area much more fulvous the submarginal line more orange, not double below costa, the black submarginal strike on white spots, those on costal half quite obsolete Hind wing whiter.

Hab. Mampur (Doherty) Erp 26 millim Type in coll Elwes.

4172 Crambus nivellus, Koll Hugel's Kaschmer, 11, p 405, C & S no 4076
Crambus todarius, Butl P. Z S 1883, p 173, C & S no 4702
Crambus auryittatus, Moore, Lep Ath p 226, C & S no 4603



Fig 11 - Crambus nitellus, d. 1

Differs from hemileucalis in the fore wing having no fulvous on costa, the lower edge of the white fascia straight throughout, a white fascia on inner margin, no submarginal line

Hab. Dharmsála , Sikhim ; Nilgiris. Exp 24 millim.

4173 Crambus perlellus, Scop Ent Carn 620, p 243 Crambus warringtonellus, Staint Man 11, p 184

Head, thorax, and abdomen white, more or less tinged with fuscous Fore wing silvery white, more or less tinged with ochreous or fuscous, and in the form warringionellus all the veins streaked with fuscous. Hind wing more or less suffused with fuscous and the veins streaked with fuscous

Hab. Europe, Kashmir Exp 30 millim.

4174 Crambus impurellus, Hmpsn P Z S 1895, p 988

White Fore wing with the costal area slightly tinged with ochreous fuscous, the outer margin usually with a more or less developed series of black specks Hind wing tinged with fuscous Hab. Afghanistan, Kashmir. Eap. 26 millim.

- B. Fore wing with the aper acute and produced, the outer margin not excised below apex
- 4175 Crambus nigricosta, Hmpsn Ill Het viii, p 143, pl 156, fig 22

White, palpi at sides and antennæ rufous, thorax striped with rufous, abdomen blackish Fore wing silvery white, the costal and outer margins narrowly black, cilia pale rufous.

Hab Nilgiris. Eap. 24 millim.

4176 Crambus nigriciliellus, Zell Mon Chil & Cramb p 52, C & S no 4707 Crambus inclaralis, Wik. Cat. XXVII. p. 166, C & S no 4664

Crambus inclaralis, Wik Cat xxvii, p 166, C & S no 4664 Crambus brachypterellus, Wik Cat xxxv, p 1757

White, very slightly sullied with fuscous Fore wing usually with a marginal series of dark specks from apex to vein 3, the underside suffused with fuscous

Hab Japan, China, Dharmsála; Bombay Evp 22-28 millim.

- C. Fore wing with the apex acute and produced, the outer margin excised below apex, hind wing with the lower part of cell very long
- 4177. Crambus malacellus, Dup. Lep Fr vn, p 61, pl 270, fig 5, C & S no 4697 Crambus hapaliscus, Zell K. Vet -Ak Handl Stockholm, 1854,

p 71, C & S no 4695 Crambus concinellus, Wik Cat xxvii, p 165

Head white; palpi cupreous black at sides, thorax black with white dorsal stripe, abdomen fuscous, whitish towards extremity. Fore wing cupreous black, with broad silvery white fascia from base, tapering beyond the cell; the inner margin more or less broadly white, two oblique white postmedial streaks from costa to apex of medial fascia, from which a line, angled outwards on vein 2, runs to inner margin; the area beyond it grey with four black streaks at middle; an apical black spot with white line on its inner edge and white patch below it. Hind wing white, tinged with fuscous towards outer margin.

Hab Palearctic, Ethiopian, Oriental, and Australian regions

Exp 20 millim

- SECT II Fore wing with vein 11 becoming coincident with 12; hind wing, and often the fole wing, with veins 4,5 stalked.
- 4178 Crambus ochristrigellus, Hmpsn P Z S 1895, p 938
- d. Ochreous Fore wing with the interspaces irrorated with fuscous scales, forming obscure streaks from base to beyond middle and obscure postmedial and submarginal series of short streaks, two dark specks on the margin below middle. Hind wing ochreous white

Hab. Lahore; Ceylon. Exp. 14-22 millim vol iv

Genus DIPTYCHOPHORA.

Diptychophora, Zell Stetim ent. Zeu 1866, p 158 Ditomoptera, Hmpsn. Ill Het 1x, p 179 (1893)

Type, D kuhlweinn, Zell, from Brazil

Range Neotropical, Oriental, and Australian regions.

Palpi porrect, clothed with long hair and extending about the length of head, maxillary palpi triangularly scaled, frons rounded antennes of male somewhat thickened and flattened, tibize with the spurs long and equal. Fore wing with the outer margin deeply excised below apex and slightly below vein 5, vein 3 from near angle of cell; 4, 5 from angle, 7 straight and well separated from 8, 9, 10 free; 11 free or becoming coincident with 12. Hind wing with veins 3, 4 from angle of cell, 5 from well above angle, 6, 7 from upper angle.

4179 Diptychophora minutalis, Hmpsn Ill Het ix, p 179, pl 174, fig 31
Diptychophora præmaturella, Snell Trans Ent Soc 1890, p 643 (nec Meyr)

Head, thorax, and abdomen grey and fulvous, palpi yellowish. Fore wing grey suffused with brown, an indistinct curved antemedial line; a yellowish-brown or bright yellow patch from costa beyond middle embracing the blackish discocellular spot, an indistinct curved double submarginal line, the apical area bright yellow, with a white streak on it, some yellow on margin and three black spots below middle. Hind wing pale fuscous

Hab Dharmsála, Sikhim; Bhután; Ceylon Exp 10 millim

- 4180 Diptychophora tripunctata, Moore, Lep Atk. p 226, C & S. no 4681.
- J. Orange fulvous, irrorated with fuscous. Fore wing with traces of dark specks on middle of costa, the apex orange, with a fuscous line across it and a white spot on it, the margin orange, with three black spots at middle; cilia fuscous, black at base. Hind wing yellowish white.

Hab Sikhim; Khásis Exp. 16 millim.

4181. Diptychophora euzonella, n. sp

Head, thorax, and abdomen almost pure white. Fore wing white, the basal area irrorated with brown, forming a large patch on basal part of costa and a subbasal patch below the cell, a brown-edged bright fulvous antemedial band angled below costa, the discal area prominently irrorated with black-brown, two oblique fulvous fasciæ across apex, a fulvous marginal band enclosing four black spots towards outer angle, this sulvery. Hind wing white tinged with fuscous, the cilia white

Hab. Khásis Exp 14 millim. Types in coll. Rothschild and

BM

4182 Diptychophora albilinealis, n sp

d Head, thorax, and abdomen fuscous Fore wing reddish brown, with diffused fuscous black on basal area, a white ante-medial line slightly indented below costa and with a black line on its outer edge, two dark-edged vellow discocellular spots, a dark-edged white postmedial line angled below costa, then oblique and sinuous to inner margin, a curved white streak on a yellowish mark on apical area, three marginal black spots below middle; the bases of cilia fuscous Hind wing fuscous

Hab E Pegu (Doherty) Exp 14 millim Type in coll Elwes

4183 Diptychophora griseolalis, Hmpsn P Z S 1895, p 943

Q Whitish, thickly irrorated with brown Fore wing with the costa pale fulvous at middle, an antemedial white line with dark line on its outer edge and angled below costa, a slight yellowish discorellular spot, a postmedial line highly excurved below costa, then oblique, crenulate, and with white spots on its outer edge to inner margin, the apical area yellow, with a white fascia, a dark line through the cilia

Hab Jubbulpore Exp 14 millim

4184 Diptychophora adspersella, Snell Tyd v Ent 1893, p 61, pl 3, bg 4

d. Head white, palpi brown at sides; thorax vellowish brown, abdomen pale. Fore wing yellowish white; the basal



Fig 12 Diptychophora adspersella, d

area irrorated with dark scales, a slightly oblique double medial dark line becoming orange at costa, the area beyond it whitish, followed by a series of dark streaks in the interspaces, then a series of orange streaks on the veins on the inner side of the fuscous submarginal line, which

is angled outwards to the margin at vein 5, two black marginal specks below middle; cilia silvery fuscous. Hind wing yellowish white, with dark marginal line on apical area. Underside of fore wing fuscous, the marginal area pale, yellow at apex.

Hab Dharmsála, Ceylon. Exp 10 millim.

Genus PLATYTES.

Platytes, Guen Eur Microlep Ind Meth p 86 (1845) Ptychopseustis, Meyr Trans Ent Soc 1889, p 521

Type, P cerussella, Schiff, from Europe. Range Universally distributed

Proboscis well developed. Palpi porrect, extending two to

three times length of head and clothed with rough hair; maxillary palpi triangularly scaled, from rounded, antennæ of male minutely serrate and ciliated, tibia with the spurs nearly equal. Fore wing with vein 3 from before angle of cell, 4, 5 from angle, 7 straight and well separated from 8, 9, which are sometimes coincident, 10 free, 11 usually oblique. Hind wing with vein 3 from before angle of cell, 4, 5 from angle or stalked, 6 from upper angle, 7 anastomosing with 8.

SECT. I. (Platytes). Fore wing with the outer margin not indented at vein 6.

A. Fore wing with vein 11 anastomosing with 12.

4185 Platytes diatræella, n sp

Head, thorax, and abdomen white tinged with olive-brown. Fore wing white, the interspaces streaked with olive-brown and irrorated with long olive-brown scales, leaving the veins broadly white, a marginal series of dark specks. Hind wing white, slightly suffused with olive fuscous

Hab Khasis Exp. 40 millim. Types in coll Rothschild and

BM

B For e wing with vern 11 free and oblique

4186 Platytes paralella Zell Stettm ent Zent 1867, p. 389, pl n, fig 1, C & S no 4699

Head white, palpi rufous at sides, antennæ rufous, thorax white striped with rufous; abdomen pale fuscous. Fore wing whitish suffused with rufous, leaving the inner and outer areas white, a dark line from costa just beyond middle, very acutely angled below costa, then very oblique and with a black discocellular speck on it; a similar postmedial line excurved below costa instead of angled, a marginal series of black specks, ciha pale rufous, fuscous at base. Hind wing whitish, with fine brown marginal line towards apex.

Hab Sikhim, Khásis. Kap. 20 millim.

4187. Platytes marginipunctalis, Hmpsn. P Z & 1895, p 945

Pure white; palpi rufous at sides; collar with two rufous lines. Fore wing with slight rufous streaks from base along costa, median nervure, and vein 1; a medial rufous line very highly angled below costa and with a black discocellular spot on it, a double submarginal rufous line highly angled on vein 6, its outer portion indistinct and minutely crenulate near the angle; a marginal series of black specks; the clus silvery at base, the tips fuscous. Hind wing pure white. Underside of fore wing suffused with fuscous

Hab. Dharmsala Exp. 18 milim.

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4188. Platytes niveifascialis, Hmpsn P Z S 1895, p 945

d Head white, palpi brown at sides, thorax white and brown, abdomen ochreous white. Fore wing pale ochreous

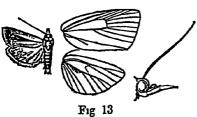


Fig 13
Platytes niverfascialis, 5 1

brown, with silvery white fascia from base through the cell, terminating in a point beyond the cell and edged by brown lines, some dark brown scales on inner area; a brown line from costa beyond middle, double to vein 6, where it is highly angled near the margin, then inwardly oblique, sinuous

and obsolescent, a fuscous triangular shade on outer area meeting the apex of the silvery fascia, a fine crenulate dark marginal line. Hind wing ochreous white, slightly tinged with fuscous on marginal area.

Hab. Nilgiris. Exp 22 millim.

4189. Platytes strigulalis, Hmpsn P Z S 1895, p 946

J. White; palpi fuscous at sides; abdomen with the two basal segments yellow above. Fore wing with oblique yellow-brown strige from costa, slight brown streaks below costa and in cell, the inner area irrorated with a few blown scales and with traces of a medial oblique line; a dark discocellular speck; the outer area prominently streaked with yellow-brown; an indistinct waved submarginal line bent inwards to costa and inner margin; a marginal series of black specks. Hind wing white.

Hab. Murree; Meean Meer, Punjab; Nágas, Ceylon. Exp. 20 millim.

4190. Platytes albipennella, Hmpsn. P Z S 1895, p 946

d. Cretaceous white; palpi brownish at sides, abdomen with the two basal segments ochreous above. Fore wing with traces of pale fulvous streaks in the interspaces, and of a pale fulvous spot at lower angle of cell; a marginal series of dark specks, cilia with three brown lines through them Hind wing pure white.

Hab. Murree Exp 18 millim.

4191. Platytes fulvizonella, n sp

Head, thorax, and abdomen white irrorated with black. Fore wing white irrorated with black; a broad rather ill-defined medial fulvous band, the black irroration on disk taking the form of three diffused obliquely placed spots, a curved fulvous postmedial line expanding towards costa, a fulvous marginal band. Hind wing pale fuscous

Hab. Khásis. Exp. 13 millim. Types in coll. Rothschild and B.M.

4192 Platytes interstriatella, Hmpsn P Z S 1895, p 945

of White, palpi rufous at sides, the thorax marked with rufous, abdomen brownish. Fore wing with the interspaces suffused with rufous, the veins white, a blackish patch below base of cell and a streak on base of inner margin, an ill-defined very oblique white band from lower angle of cell to inner margin, with blackish patches beyond discoccillulars and below cell, an oblique submarginal white line from vein 3 to inner margin, a series of blackish marginal marks. Hind wing whitesh.

Hab. Dharmsola. Exp. 24 millim.

4193 Platytes apicella, n sp

Head, thorax, and abdomen white and reddish brown, antennæ annulated with brown. Fore wing whitish, the base of costa, cell, disk, and inner area suffused with rufous and irrorated with brown, leaving a streak below costa white, traces of a highly dentate antemedial line, a black spot at lower angle of cell; outer area white, the veins streaked with brown, an oblique brown line across apex, then becoming sinuous and slightly waved, with a prominent semicircular brown mark beyond it on apical part of costa, a brown marginal line becoming macular at middle. Hind wing white tinged with fuscous.

Hab Khasis; Ceylon (Pole). Exp. 24 millim Type in B.M.

4194. Platytes ictericalis, Swinh P Z S 1885, p 876, pl 57, fig 16, C & S no. 4534

d Ochreous suffused with fuscous Fore wing with indistinct minutely waved fuscous antemedial line, three dark specks on costa before middle; an ochreous discocellular spot, a minutely waved fuscous submarginal line excurved from costa to vem 5, then oblique to inner margin Hind wing pale fuscous

Hab. Aden, Poons. Exp 16 millim

4195. Platytes fuscivenalis, Hmpsn. P Z S 1895, p. 947

Ochreous Fore wing with the veins streaked with brown; an obsolescent bisinuate very oblique leaden-coloured antemedial line; two leaden-coloured discocellular specks, a postmedial leaden-coloured line very oblique from costa to vein 6, then waved and obsolescent a marginal series of dark specks. Hind wing pale ochreous, with dark marginal specks from apex to vein 3.

Hab. Ceylon. Exp 18 millim.

4196 Platytes plumbeolmealis, Hmpsn P Z & 1895, p 947

Differs from fuscivenalis in being uniform ochreous irrorated with fuscous. Fore wing with the antemedial and postmedial lines prominently silvery, oblique from costs to above middle, then

waved and nearly erect to inner margin. Hind wing with traces

of submarginal line.

Some specimens have the fore wing strongly suffused with leaden-grey before the antemedial and beyond the postmedial lines

Hab. Punjab, Khásis, Ceylon. Evp 18 millim

SECT II Fore wing with the outer margin slightly indented at vein 6.

4197. Platytes argentisparsalis, Hmpsn P Z S 1895, p 948

Q Differs from plumbeolineals in being more fuscous and prominently irrorated with black scales. Fore wing with brilliant silver line from base of costa to median nervure near angle of cell, then erect to inner margin, with a black spot inside it below cell, a curved silver fascia on subcostal nervure at end of cell and a spot at lower angle, the silvery submarginal line more excurved below costa and nearer the margin, the marginal specks more prominent and on a grey band

Hab Ceylon. Eap 18 millim.

SECT III (Ptychopseustis). Fore wing with the outer maigin slightly indented at veins 6 and 2

- 4198 Platytes amenella, Snell Tyd v Ent 1880, p 247, and 1884, pl v, fig 9
- Q. Grey-brown Fore wing with sinuous fuscous antemedial line with ochreous spot on its outer edge below median nervure; an ochreous discocellular speck, a fuscous postmedial line defined by ochreous, oblique from costa to vein 6, then sinuous, a series of dark specks just inside the margin; a dark line at base and through middle of cilia. Hind wing paler, with diffused fuscous postmedial line

Hab Shan States, Celebes, New Guinea Exp 16 millim.

Genus EROMENE.

Eromene, Hubn Verz p 366 (* 1818) Euchromius, Guen Eur Microlep Ind Meth. p 86 (1845), præocc

Type, E bella, Hubn, from Europe.

Range Neartic and Palæarctic regions, NW. India

Palpi porrect, extending about twice the length of head and thickly scaled, maxillary palpi triangularly scaled, from produced to a conical process, antennæ of male thickened and flattened, tibiæ with the outer spurs about two-thirds length of inner. Fore wing with the apex usually rounded, vein 3 from before angle of cell, 4,5 well separated at origin, 7 well separated from 8, 9, 10 free, 1 oblique, not approximated to 12; male with a

shallow fovea in cell Hind wing with vein 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle.

4199. Eromene superbella, Zell. Stettin ent Zeit 1849, p 314

Grey, suffused with pale yellowish brown Fore wing morated with dark brown scales, a straight dark-edged yellow band just beyond middle, with a white band on its inner edge, a thickly irrorated brown patch just beyond cell, a white line from costa towards spex to near outer margin on vein 6, then to inner margin as a submarginal line, the apical area with oblique yellow fascia and triangular white costal mark; black marginal spots from vem 5 to outer angle connected by silvery spots on their outer edges into sets of 2, 2, 3, and 2 spots. Hind wing white, with traces of curved submarginal line.

Hab. Europe, Sind, Punjab. Exp. 16 millim.

4200. Eromene ocellea, Haw. Lep Brit p 486, C & S. no 4680. Eromene bella, C. & S no. 4579 (nec Hubn)

Brownish ochreous. Fore wing rather long and narrow, with



Fig 14 - Eromene ocellea, S. &

postmedial somewhat oblique fulvous-yellow band with silvery line on it, the area beyond it greyish irrorated with black scales; fulvons-yellow fascia traversed by a silvery line across apical area con-

tinued as double brown lines to inner maigin, the marginal spots as in superbella. Hind wing whitish, tinged with fuscous towards outer margin

Some specimens have a fuscous tinge.

Hab Europe, Aden; Atghanistan; Punjab, Karáchi, Mhow; Poona. Exp. 20 millim.

Genus STENOCHILO.

Stenochilo, Hmpsn. P. Z S 1895, p 950

Type, S. camcostalis, Hmpsn.

Range. Sind, Calcutta

Palpi porrect, extending about one and a half times length of head and smoothly scaled, maxillary palpi dilated with scales at extremity; from with a conical prominence; antenne of female somewhat annulate; tibis with the outer spurs about two-thirds length of uner. Fore wmg long and very narrow; the apex rectangular; the unner margin lobed towards base; year 3 from near angle of cell, 4, 5 well separated at origin, 6, 7 shortly stalked; 10 and 11 free. Hind wing with vein 3 from near angle of cell, 4, 5 from a point in female, 5 absent in male, 6,7 shortly stalked.

4201. Stenochilo canicostalis, Hmpsn P Z S 1895, p 950

Reddish brown irrorated with grey; the head, collar, and



Fig 15—Stenochilo canicostalis, Q 1 hyaline whit Hab. Sind, Calcutta Exp, & 26, Q 30 millim.

costal area of fore wing very thickly irrorated, the last with white spot below middle of cell; traces of a submarginal line and marginal series of specks. Hind wing hyaline white.

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Genus MACROCHILO.

Macrochilo, Hmpsn P Z S 1895, p 950

Type, M ambiguellus, Snell.

Range, NE India.

Palpi porrect, clothed with rough hair, and extending about one and a half times length of head, maxillary palpi dilated with hair; frons with a conical process; antennæ of male thickened by appressed serrations, patagia fringed with long hair in male, tibiæ with the spurs long, the outer spurs about two-thirds length of inner. Fore wing with the apex acute and produced; vein 3 from before angle of cell; 4, 5 from angle, 7 shortly stalked with 8, 9, 10, 11 oblique. Hind wing with vein 3 from before angle of cell, 4, 5 from angle; 6, 7 stalked.

4202 Macrochilo ambiguellus, Snell Trans Ent Soc 1890, p 642, pl xx, fig 4
Pydna notata, Swinh Trans Ent Soc 1891, p 479, pl xix, fig. 16

Pale yellowish olive-brown Fore wing with dark speck below base of cell, a spot at middle of cell and another below it; a small

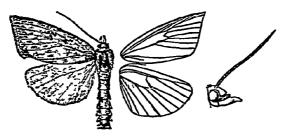


Fig 16 -Macrochilo ambiguellus, d 1.

annulus in upper angle; an oblique slightly sinuous postmedial series of dark spots, traces of a waved submarginal line. Hind wing white, both wings with marginal series of black specks. Underside of both wings with black spot at upper angle of cell; postmedial and marginal series of black specks

Hab. Sikhim; Khásis. Exp, o 46, 9 58 millim.

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Chilo, Zenck. Germar's Mag Ent 11, p 83 (1817)

Type, C phragmitellus, Honrath, from Europe Range Universally distributed

Proboscis absent. Palpi porrect, clothed with rough hair, and extending from two and a half to three times length of head, maxilary palpi dilated with scales at extremity, from with a conical projection, antenna minutely serrate and ciliated, tibia with the outer spurs about two-thirds length of inner Fore wing with the apex rectangular in male, typically acute and produced in female, vem 3 from before angle of cell, 4,5 well separated at origin, 7 straight and well separated from 8, 9, 10 free; 11 curved and approximated to 12 Hind wing with vein 3 from near angle of cell; 4, 5 from angle, 6, 7 from upper angle

4203 Chilo simplex, Butl P Z S 1880, p 690 Crambus zonellus, Swinh P Z S. 1884, p 528, pl 48, fig 16, Crambus partellus, Swinh P Z S 1885, p 879, C & S no 4700

Yellowish brown suffused with fuscous Fore wing with



Fig 17—Chilo simplex, of

the costal area rather darkest, traces of dark specks below middle of cell and at lower angle, the veins of outer area slightly streaked with fuscous, a marginal series of black Hind wing whitish with slight fuscous tinge

2 paler, the hind wing

The form partellus has on the fore wing of male a highly curved antemedial series of short fuscous streaks, a slight yellowish patch in end of cell, an oblique series of diffused fuscous streaks from apex to middle of inner margin, and a submarginal series of specks, female with some diffused fuscous from apex round lower angle of cell, or sometimes nearly evenly suffused with fuscous, with a dark fuscous patch beyond cell. Exp. 22 millim

Hab Japan; Chusan, Formosa, Meean Meer, Punjab, Karáchi.

4204 Chilo ceylonicus, Hmpsn P Z S 1895, p 957

Ochreous brown morated with fuscous fuscous irroration forming streaks in the interspaces except on inner margin, an indistinct fulvous medial line curved below costa Fore wing with the and with silvery scales on its edges, a submarginal silver line bent inwards below costa, a marginal series of black spots with white

сніго. 27

centres; calla silvery Hind wing whitish, tinged with fuscous on apical area in male, an indistinct marginal series of black specks. Hab. Ceylon. Exp, 3 22, 2 26 millim.

4205 Chilo suppressalis, Wlk Cat xxvii, p 166

d Head and thorax brown and white, abdomen pale Fore wing with the apex somewhat acute, ochreous, wholly suffused with brown except a patch in cell and a streak below median nervure, the inner margin whitish, a sinuous rufous medial line with silvery spots on its inner side, also on discocellulars, and below vein 2, a rufous submarginal line, highly angled at vein 6 and with silvery line on its outer edge; a marginal series of black specks; the cilia rufous Hind wing white

2 much more orange fulvous, fore wing irrorated with brown; the medial and submarginal lines almost obsolete, the silvery spots below the cell prominent and sometimes double, the post-

medial area irrorated with silvery scales

Hab Shanghai, Meean Meer, Punjab, Sibságar, Assam, Calcutta; Ceylon Exp, 3 18, 2 18-20 millim.

4206 Chilo dichromellus, Will Cat xxxv, p 1707

d Dark brown, vertex of head and thorax ochreous, abdomen fuscous Fore wing with the inner area ochreous, diffused spots of black and white scales on discocellulars and vein 2, a marginal series of white specks on small black spots Hind wing fuscous.

Q with the palpi more ochreous; the vertex of thorax brown. Fore wing with the inner area less ochreous, hind wing whitish

slightly suffused with fuscous

Hab Bhutan Exp, & 28, \$ 40 millim.

4207. Chilo pulverulentus, Warr A M N H (6) 1x, p 393

Ochreous brown slightly irrorated with fuscous; palpi blackish at sides. Fore wing with oblique slightly curved antemedial black line; a diffused fuscous black spot at lower angle of cell; a sinuous postmedial line bent inwards between veins 3 and 2; a slight marginal line. Hind wing pale fuscous

Hab Dharmsála, Khásis Exp, o 16, 2 22 millim.

4208. Chilo fuscidentalis, Hmpsn P Z S 1895, p 956

Q Reddish brown suffused with fuscous. Fore wing with the costal half of wing to beyond cell fuscous, a reddish-brown spot in end of cell, a dentate dark anteinedial line oblique from costa to vein 1, a curved highly dentate dark submarginal line. Hind wing with obscure curved diffused postmedial line terminating at vein 2

Hab Sikhim. Exp. 46 millim.

4209. Chile terrentellus, Meyr. Proc Lann Soc. N. S W m, p 184

A Head, thorax, and abdomen white, slightly tinged in parts with fuscous. Fore wing with pure white costal stripe, followed by a cupreous-brown fascia through the cell expanding to outer margin, with a similar pure white tascia below the cell, the inner area cupreous brown. a marginal series of black specks. Hind wing pure white, the apex with a fine dark marginal line, both wings with time fuscous line through the cilia.

Hab. Sikhim, Shan States, Australia Exp. 30 millim.

Genus ESCHATA.

Eschata, Wlk Cat 1x, p 133 (1856) Cherecla, Wlk. Cat xxx, p. 633 (1865).

Type, E. gelida, Wlk. Range Oriental region

Palpi porrect, reaching slightly beyond the frons and thickly scaled, maxillary palpi dilated with scales and nearly as long as labial, frons produced to an acute corneous point, antennæ of male thickened and flattened, tibiæ and tarsal joints fringed with long hair. Fore wing with vein 3 from before angle of cell; 7 from cell, anastomosing, or stalked with 8, 9, 10 free, 11 curved and running along 12 Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle.

SECT. I. Fore wing with the apex somewhat produced and acute. 4210. Eschata xanthorhyncha, *Hippen. P Z S.* 1895, p. 960.

d. Differs from gelida in the head and thorax being white,



Fig 18—Eschata xanthorhyncha, of

palpi orange, banded with white; fore legs orange fringed with white, tarsi banded with orange. Fore wing with the area between the postunedial and submarginal lines evenly irrorated with black scales. Hind wing

fuscous black; the cilia white. Underside with the basal two-thirds of wings suffused with fuscous black.

Hab Ceylon. Exp. 32 milim.

4211. Eschata gelida, Will Cat. 1x, p 183, C & S. no. 4652.

3. Differs from chrysargyra in the head, thorax, and abdomen being tinged with fuscous. Fore wing with the basal half suffused with golden brown, leaving a band of white inside the postmedial

line, a complete series of marginal black specks, the whole cilia metallic fuscous. Hind wing suffused with fuscous, the costal and outer margins whitish, the cilia white. Underside slightly suffused with fuscous

Hab Sikhim, Khásis Erp. 40 millim

4212 Eschata chrysargyiia, W7h Cat xxxii, p 634 Eschata aigentata, Moore, Lep Ath p 227, C & S no 4650

Pure white, antennæ blackish, abdomen with the two basal segments orange above, terminal joint of tarsi usually orange, wings silvery white. Fore wing with silver streaks in the interspaces beyond and below cell; a pale waved orange line from costa just beyond middle running out to an acute angle on vein 5, then bent inwards to below end of cell on vein 2, the area beyond it below costa and vein 4 irrorated with a few black scales, a bright orange curved submarginal line, black marginal specks below apex and above outer angle, the cilia golden at apex and above outer angle

Hab N China; Sikhim, Khásis, Nágas, Manipur, Nilgiris,

Rangoon, Ceram Exp, & 32-40, Q 44-60 millim

4213 Eschata xanthocera, Hmpsn P Z S 1895, p 961

d Differs from chrysargyria in the antennæ being orange, the legs orange fringed with white hair. Fore wing with the postmedial and submarginal lines almost obsolete, the cilia white with golden tips throughout

Hab. Čeylon Exp. 38 millim

4214 Eschata melanocera, n sp

3 Differs from argentata in the bases of 1st and 2nd joints of palpi being black, antennæ black, fore tibiæ orange fringed with white hair, the tarsi banded with orange. Fore wing with the orange postmedial line slightly angled on vein 5 and below vein 2, and reaching middle of inner margin, the area between it and the submarginal line evenly irrorated with black scales, a marginal series of black specks, the whole cilia metallic fuscous. Hind wing with some dusky fulvous on inner area.

Hab Nágas (Doherty) Exp. 46 millim Type in coll Elwes.

SECT II Fore wing with the apex rectangular and not produced.

4215 Eschata conspurcata, Moore, Lep Ath p 227, C & S no 4651.

d Silvery white, palpi black, white below and at end of 2nd joint and maxillary palpi, antennæ black, abdomen fuscous above, the first two segments orange. Fore wing with obsolescent orange

postmedial line arising from costa beyond middle, oblique to vein 5, where it is angled, then nearly straight to inner margin near the curved orange submarginal line; some black marginal specks above outer angle. Hind wing smoky black, with marginal series of black stries, the cilia white. Underside with the basal two-thirds suffused with smoky black.

Q. Abdomen white; fore wing with the postmedial line almost obsolete; hind wing white, slightly suffused with fuscous below cell, underside slightly suffused with fuscous at base of wings.

Hab. Sikhim. Exp, o 50, \Q 60 millim.

4216 Eschata percandida, Swinh Trans Ent Soc 1890, p 293

Q Silvery white, abdomen with the two basal segments orange above. Fore wing with indistinct orange postmedial line excurved beyond cell and double from lower angle of cell to inner margin, the area beyond it irrorated with small rufous scales to the indistinct curved orange postmedial line, which is double from vein 5 to inner margin, a marginal series of black specks.

Hab. Rangoon. Exp 42 millim.

4217. Eschata ochripes, Hmpm. Ill. Het viii, p. 148, pl. 156, fig 29

d. Silvery white, palpi black at base; antennæ fulvous; legs orange fringed with white hair, abdomen fuscous above, the first two segments orange. Fore wing uniform white, irrorated with a few black scales on outer area. Hind wing suffused with fuscous except the costal and outer areas. Underside of fore wing with diffused black streaks on costal area and median nervure beyond cell

Hab Nilgiris. Exp. 40 millim.

Genus MESOLIA.

Mesolia, Rag Ann Soc Ent France, 1888, p. 282

Type, M pandavella, Rag Range N America, W. Indies, China; India, Ceylon.

Palpi porrect, thickly clothed with hair, and extending about twice the length of head, maxillary palpi triangularly scaled, from with a conical projection, antennæ of male thickened and flattened, tabiæ with the outer spurs about half the length of inner. Fore wing long and narrow, the apex rounded, veins 4, 5 from angle of cell, 3 absent, 7, 8, 9 stalked, 10, 11 free, the outer margin produced from apex to vein 5. Hind wing with vein 3 absent; 4, 5 from angle of cell, 6 from upper angle; the upper maigin of cell widely separated from 8, 7 curving upwards to anastomose with 8.

- 4218. Mesolia pandavella, Rag Ann Soc Ent France, 1888, p 282, C & S no 4724.
 - d. Dark reddish brown irrorated with fuscous Fore wing

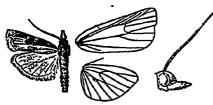


Fig 19 —Mesolia pandatella, 6

with diffused whitish fascia from base below median nervure to outer margin; a brown medial line with white inner edge, oblique from costa to vein 4, then angled and dentate inwards on vein 2, a white line across apical area angled on the

margin at vein 6, then dentate, a sinuous white line across apex; cilia with a dark line through them from costa to the indentation. Hind wing whitish

p browner, with hardly a trace of the pale fascia on fore wing.

N Indian specimens are paler and more rufous than those from Cevlon

Cevlon

Output

Description

Descrip

Hab Dharmsála, Lahore; Trichinopoly; Ceylon. Exp., 5 18, 2 22 millim.

Genus SURATTHA.

Surattha, Wik Cat xxvii, p 75 (1863) Calarina, Wik Cat. xxxv, p 1769 (1866)

Type, S invectalis, Wlk

Range India, Ceylon, and Burma, Java; Australia, Africa

Palpi porrect and thickly scaled, extending about one and a half times length of head, maxillary palpi triangularly scaled; frons with a conical process, antennæ of male bipectinated, usually with long branches; tibiæ with the spurs long, the outer spurs about two-thirds length of inner. Fore wing long and narrow, the apex rounded, vein 3 from near angle of cell; 4, 5 usually on a long stalk, 6, 7 and 10, 11 free. Hind wing with vein 3 from near angle of cell; 5 absent; 6 obsolescent from above middle of discocellulars, 7 anastomesing with 8.

SECT. I Fore wing with veins 4, 5 stalked.

4219. Surattha invectalis, Wik Cat xxvii, p 76, C & S no 4723 Pindicitora thysbesalis, Wik Cat xxvii, p 135, C & S no 4718 Scopula nigritascialis, Wik Cat xxxiv, p 1472, C & S no 4155. Calarina albirenella, Walk Cat xxxv, p 1770, C & S no 4721

Greyish ochreous irrorated with fuscous Fore wing with indistinct pale waved antemedial line, with fuscous suffusion on the edges, similar more distinct medial and postmedial lines, the latter angled on vein 5, the former with dentate dark marks on its outer edge, the latter on its inner, a white spot beyond discocellulars;

a marginal series of black specks and a line through the cilia.



Fig 20—Surattha invectalis, of }

Hind wing pale or dark fuscous, rarely pure white

In many sperimens the area between the medial and postmedial lines of the fore wing is blackish, in one female the whole fore wing is suffused with

fuscous, and the markings hardly traceable

Hab W and S India, Ceylon, Shan States, Java Exp, 3 22-30, 2 26-32 millim

4220. Surattha albipennis, Butl P. Z S 1886, p 383, C & S

Greyish ochreous irrorated with fuscous. Fore wing with fuscous-irrorated grey fasciæ on costa, below cell and vein 1, beyond cell and in interspaces of outer area, traces of sinuous antemedial and medial lines, a white spot beyond cell, a highly dentate submarginal line defined by white and ochreous on its inner edge; a marginal series of black and white specks. Hind wing pure white.

Hab. Campbellpur, Karáchi, E Africa Exp, o 24, 9 28 millim

4221. Surattha scitulella, Wik Cat xxxv, p 1755, C & S no 4701

Brownsh ochreous, head, thorax, and abdomen tinged with fuscous. Fore wing with diffused fuscous on basal inner area and defining the inner side of the oblique ochreous medial band, the area between which and the oblique submarginal band is fuscous except on costal area, a black discocellular spot, the submarginal band dentate inwards below costa, the marginal area fuscous, with a series of black specks. Hind wing pale fuscous or whitish Hab, Combatore, Ceylon Exp, & 16, 2 24 milhim.

SECT. II. Fore wing with veins 4, 5 from cell, antennæ of male bipectinated with short branches dilated at extremity.

4222 Surattha fuscilella, Swink A M N H (6) xvi, p 301

d. Dark fuscous brown with a slight grey tinge Fore wing with obscure dark outwardly oblique antemedial and medial lines, a discocellular spot, an obscure sinuous submarginal line, a marginal series of specks Hind wing dark brown.

Hab. Raipur; Bombay. Exp. 18 millim.

Genus ANCYLOLOMIA.

Ancylolomia, Hubn Verz p 363 (? 1818) Jartheza, Wik Cat xxvii, p 183 (1863)

Type, A tentaculella, Hubn, from Europe.

Range Argentina, Mediterranean subregion, Ethiopian and Oriental regions, Australia

Palpi porrect, thickly clothed with hair, and extending about three times the length of head, maxillary palpi triangularly scaled, frons oblique, abdomen long, tibiæ with the outer spurs about two-thirds length of inner Fore wing long and narrow, the apex produced, the outer margin excised below apex, then excurved, veins 3, 4, 5 from angle of cell, 7, 8, 9 stalked, 10 free, 11 becoming coincident with 12 Hind wing with vein 3 from close to angle of cell, 4, 5 from angle or stalked · 6 from above middle of discocellulars and obsolescent, 7 anastomosing with 8

SECT. I. Antennæ of male with short uniseriate laminated branches, of female simple

4223 Ancylolomia chrysographella, Koll Hugel's Kaschmir, 17, p 494, C & S no 4712

Ancylolomia capensis, Zell Mon Chil & Cramb p 11.

Ancylolomia taprobanensis, Zell Hor Ent Ross 1877, p 25, pl 1, fig 8, Moore, Lep Ceyl in, pl 184, figs 2, 2a, C & S

Ancylolomia indica, Feld Reis Nov. pl 137, fig 19, C & S no 4714

Ancylolomia argentata, Moore, Lep. Ceyl m, p 382, pl 184, fig 3. C & S no 4708

Brownish ochreous. Fore wing with silvery and yellow fasciæ, with streaks of black scales on them in cell and the inter-

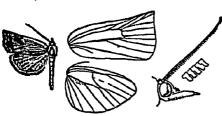


Fig 21 Ancylolomia chrysographella, d.

spaces beyond and below it; a minutely dentate submarginal silvery line with a more prominent tooth at vein 3, a whitish marginal band with a series of dark specks on it, the cilia silvery Hind wing whitish, pale fuscous, or dark fuscous in the form

taprobanensis, which is more common in the South

The fore wing may have a white fascia developed on median nervure

Hab S Africa; Aden; Japan; China, Formosa; throughout India, Ceylon, and Burma, Penang. Exp., of 20-30, 2 30-40 millim.

YOL, IV.

4224. Ancylolomia locupletella, Koll Hugel's Kaschmir, 1v, p. 394.

Differs from chysographella in the ground-colour of fore wing being much greyer, prominent white fascize on costa and below median nervure, the marginal band whiter. Hind wing pale fuscous, the margin white

The larva bores in the stems of Spinifek squarrosa. Hab Simla, Ceylon. Exp, of 22, 234 millim.

SECT. II Antennæ of male with long uniseriate pectinations.

4225. Ancylolomia saundersiella, Zell Mon Chil & Cramb p 10. Jartheza biplagella, Moore, P Z S 1872, p 582, pl 34, fig 9, C & S. no 4718 Jartheza obstatella, Swinh P. Z S 1885, p 880, pl 57, fig. 8, C. & S no 4715.

Differs from chrysographella in being more suffused with golden ochreous, the patagia blackish, with a white fascia. Fore wing with the costa black, a white fascia on median nervure, with a black fascia below it, a black speck on discocellulars. Hind wing pale fuscous in male, white in female.

Hab. Bembay; Poona Exp, & 26-30, Q 30-34 millim.

4226. Ancylolomia responsella, Wik. Cat. xxvn, p 184, C. & S Jartheza xylinella, Wik Cat xxvii, p 184; C & S no 4717 Jartheza cassimella, Swink P. Z S. 1886, p 461, pl. 41, hgs 4, 6, C & S no 4711

Golden brown; the patagra dark; the base of abdomen pale. Fore wing with orange-brown fascia in the cell, with black scales on it and silver fascia below it, streaks of black scales and silvery fascize in interspaces beyond cell; the inner area orange-brown, arrorated with black scales, expanding below end of cell almost to vein 2, and with a silvery fascia on it; a marginal grey band with series of black spots on it, inwardly edged by an irregularly dentate silvery line excurred to near the margin below middle, the cilia silvery. Hind wing varying from whitish to fuscous.

Hab Simla, Nepal; Mhow, Nilgiris. Exp, & 28-32, 2

34-40 millim.

4227. Ancylolomia basistriga, Moore, Lep Ceyl m, p 382, pl 184, fig. 1, C & S no 4709.

Differs from responsella in being browner. Fore wing with the fascia and streaks diffused and indistinct, the marginal markings dark and ill-defined. Hind wing fuscous

Hab. Ceylon. Eap., & 40, \$\times\$ 40-50 millim.

SECT III Antennæ of female serrate

4228 Ancylolomia uniformella, Hmpsn P Z S 1895, p 967

Q Pale ochreous Fore wing thickly irrorated with fuscous, rather more thickly in cell, where it forms an obscure fascia. Hind wing pure white

Hab Hyderabad, Sind. Exp 38 millim

Genus CHARLTONA

Charltona, Swinh P Z S 1885, p 878

Type, C kala, Swinh

Range India, Ceylon, and Burma

Palpi porrect, clothed with rough hair, and projecting about one and a half times length of head; maxillary palpi triangularly dilated with hair, from rounded; tabiæ with the outer spurs about two-thirds length of inner; wings long and narrow. Fore wing with the apex rectangular, vein 3 from before angle of cell, 4, 5 well separated at origin, 7 straight and well separated from 8, 9, 10 free, 11 curved and approximated to 12. Hind wing with vein 3 from near angle of cell; 4, 5 from angle and approximated for a short distance, 6 absent, 7 anastomosing with 8

SECT I Antennæ of male bipectinate, with short branches dilated at extremity

4229. Charltona kala, Swinh P Z S 1885, p 879, pl 57, fig 4, C & S no 4685

Head, thorax, and fore wing uniform black-brown, the last with diffused long black scales with pale bases in interspaces of inner and outer areas, abdomen and hind wing pale fuscous

Hab. Mhow, Satára, N. Kanara; Ceylon E1p, ♂ 30, ♀ 40 millim

SECT II Antennæ of male with short uniseriate laminated branches

- 4230 Charltona laminata, Hmpsn P Z S 1895, p 970
 - 3. Differs from kala in the hind wing being browner fuscous. Hab. Burma. Exp 34 millim.
- 4231 Charltona cervinella, Moore, P. Z S 1872, p 581, pl 34, fig 7;
 C & S no 4669
 Chilo interruptellus, Moore, P Z S 1872, p 581, pl 34, fig 5,
 C & S no 4674

Head and thorax brownish ochreous, the latter with black dorsal stripe, abdomen fuscous Fore wing pale ochreous brown, irro-

rated with fuscous; a black fascia from middle of cell to onter margin; a fascia from base below median nervure, and short fasciae above veins 2, 3, 4; the median nervure and veins beyond the cell



Fig 22 — Charltona cerunella, d. 1

streaked with white, a marginal series of black specks Hind wing pale fuscous, the cilia white.

Interruptella is a pale ochreous-white form, with a tendency to obsolescence of the fasciæ of fore wing; the hind wing whitish.

Hab. Bombay, Mhow, Matheran, Poona, Bangalore; Nilgiris, Pirmád, Travancore. Exp, & 40, 2 46-52 millim.

4232 Charltona bivitella, Moore, P Z S 1872, p 581, pl 34, fig. 8; C & S no 4668.

Q Differs from the form interruptella in the fascia in and beyond cell of fore using being broader and not reaching outer margin; the fascia below median nervure shorter; the patch between the veins smaller; a broad black fascia on inner area traversed towards outer margin by an ochreous streak on vein 1.

Hab. Bombay. Exp. 38 millim

4233 Charltona consociella, Wik. Cat xxvii, p 159, C & S no 4694.

Ochreous, palpi fuscous at sides. Fore wing slightly irrorated with fuscous, the costa fuscous, a black fascia below median nervure and a fascia from end of cell tapering to outer margin, a marginal series of black specks. Hind wing white.

Hab Calcutta. Exp., & 34, ♀ 44 millim.

- 4234. Charltona inconspicuella, *Moore*, P Z S 1872, p 582, pl. 34, fig 6, C & S no 4673
- Q. Ochreous white; abdomen fuscous. Fore wing with brown fascia from base below median nervure, an obsolescent fascia in and beyond the end of cell, and short streaks above veins 2, 3, 4, a marginal series of black specks. Hind wing dark fuscous, the cells white.

Hab. Bombay; Travancore. Exp 40 millim.

- 4235. Charltona desistalis, Wil. Cat xxvn, p 165, Moore, Lep Ceyl m. pl. 184, fig 10, C. & S no 4670
 - Q. Pale ochreous, thickly irrorated with brown, palp rufous at

sides; legs and abdomen fuscous. Fore wing thickly irrotated with long black-blown scales, traces of a dark fascia in and beyond cell, a marginal series of black specks. Hind wing pale fuscous.

Hab. Ceylon. Etp. 36 millim.

SECT III. Antenne of male with long uniseriate branches
4236 Charltona ortella, Swinh P Z S. 1886, p 461, pl 41, fig 3;
C & S 4677

Ochreous white, palpi black at sides; thorax with a dorsal black streak. Fore wing slightly irrorated with black, the base of costa black, a deep black tascia from base below median nervures, widest beyond the cell, a marginal series of black specks. Hind wing white or very pale tuscous, sometimes with slight fuscous shading beyond lower angle of cell.

Hab Simla, Sikhim, Jubbulpore; Mhow. Exp, & 34, Q 40

millim.

Subfamily SCHŒNOBIINÆ.

Proboscis absent or very minute; palpi usually porrect, the maxillary palpi being usually well developed and dilated with scales at extremity. Fore wing with vein 7 from cell, except in Bancpa, Ramila, and Leucoides. Hind wing with the median nervure not pectinated on upperside; vein 7 usually anastomosing with 8.

The larvæ of the species of which the early stages are known feed in the interior of reeds

Key to the Genera.

A. Palpi with the 2nd joint poirect, the 3rd upturned, fore wing with veins 7, 8, 9, 10 stalked 2 Banepa, p 39 B Palpi upturned, maxillary palpi minute ... 1 NIPHOPYRALIS, [p'38 C Palpi porrect a Fore wing with veins 7, 8,9 stalked a'. Both wings with veins 4, 5 from cell . . 5 RAMILA, p 41 b'. Both wings with veins 4, 5 stalked 4. LEUCOIDES, p. 40. b. Fore wing with veins 8, 9, 10 stalked, 7 a'. Palpi projecting about twice the length of head, hind wing with vein 7 anastomosing with 8 to near apex a2 Frons smooth, abdomen with lateral [p 42. tufts towards extremity ... 6. Eurycraspeda, b2 Frons with a sharp tuft, abdomen without lateral tufts Brihaspa, p. 42. b' Palpi projecting about the length of head, hind wing with vein 7 anastomosing with 8 to about $\frac{1}{4}$ of wing.... 8. Patiesa, p. 43.

c. Fore wing with veins 8, 9 stalked, 7 sepa-

a' Fore wing with veins 6, 7 stalked, of with a hyaline vesicle beyond the cell; palpi projecting about the length of

b' Fore wing with veins 6, 7 from cell a2 Frons flat and oblique, fore wing

with the apex rounded . b2 Frons with a rounded projection, palpi once to twice the length of

c Frons with a slight tuft, palpi three to four times length of head 10 Schoenobius, p 47

3 THYRIDOPHORA, [p 39.

11 CIRRHOCHRISTA,

[p 49

9 Scirpophaga,

Genus NIPHOPYRALIS.

Niphopyralis, Hmpsn Ill Het. 1x, p 181 (1893)

Type, N nivalis, Hmpsn.

Range Bhután, Bombay; Ceylon, Borneo.

Palpi upturned, smoothly scaled, and hardly reaching vertex of head; maxillary palpi minute, from rounded, antennæ of male bipectinate; tibise with the spurs nearly equal Fore wing short and rounded, vein 3 from near angle of cell; 4, 5 from angle, 7 well separated from 8, 9, 10, 11 free. Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle

4237. Niphopyralis nivalis, Hmpsn. Ill Het. ix, p 181, pl 174, ng 6

d. White. Fore wing suffused with pale brown except the costal



Fig 28 -Niphopyralis nivalis, &

area, an ill-defined somewhat sinuous antemedial dark line, slight dark discocellular marks, the apex and margin white, sending a tooth inwards on vein 2, and with two black specks below apex and two above outer angle Hind wing

pure white, with black marginal specks at vein 2 Hab. Ceylon Exp. 16 millim.

4238. Niphopyralis contaminata, Hmpsn. Ill Het 1x, p 181, pl 174,

d. Differs from nivalis in the metathorax being fuscous wing pure white, traces of a sinuous antemedial line, a diffused black patch on discocellulars and costa above end of cell, the whole outer area fuscous black, except the apex and margin, on which the black specks are present. Hab. Ceylon. Exp. 16 millim.

4239 Niphopyralis albida, Hmpsn Ill Het ix, p 181, pl 174,

Niphopyralis suffidalis, Swinh A M N H (6) xvi, p 299

Pure white. Fore wing with a few dark scales on discocellulars, and traces of a pale fulvous oblique streak across apical area, a black marginal speck on vein 2 of each wing

The Ceylon female is slightly sullied with fuscous and has a slight marginal fuscous line, and the form suffidalis has the hind

wing mostly suffused with fuscous

Hab Bhután, Bombay, Ceylon, Borneo. Erp, ♂ 16, ♀ 20-22 millim

Genus BANEPA.

Banepa, Moore, Lep Ath p 204 (1888)

Type, B atkinsoni, Moore

Range Sikhim

Palpi with the 2nd joint long, porrect, and clothed with hair, the 3rd upturned and long, maxillary palpi well developed and triangularly scaled, proboscis minute, antennæ of male bipectinated, legs smoothly scaled, the spins long. Fore wing with the costa arched at base, then straight, the apex produced, the outer margin excised from apex to vein 5, where it is excurved, then oblique to outer angle, vein 3 from before angle of cell, 4,5 from angle, 7, 8, 9, 10 stalked. Hind wing with vein 3 from before angle of cell, 4,5 from angle, 6,7 on a long stalk

4240 Banepa atkinsoni, Moore, Lep Ath p 204, C & S no 4491

Pale rufous, thickly suffused with fuscous Fore wing with

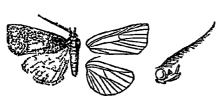


Fig 24—Banepa atkinsoni, o

slightly sinuous antemedial line with pale inner edge, black cell-spot. cuived and minutely dentate postmedial line with pale outer edge Hind wing pale, with indistinct minutely dentate curved postmedial line. Underside pale, with slight

fuscous suffusion, both wings with cell-spots, curved crenulate postmedial and marginal series of specks, fore wing with black spot on costa before the postmedial line, hind wing with black patch on outer margin near anal angle

Hab Sikhim Evp, 334, 238 millim

Genus THYRIDOPHORA

Thyridophora, Wair P Z S 1888, p 310

Type, T furia, Swinh

Range Aden; NW. India

Palpi porrect and smoothly scaled, projecting about the length

of head, the 3rd joint down-curved; maxillary palpi long and somewhat dilated at extremity, frons flat and oblique, autenue thickened and flattened, legs short, the tilme hairy, with the spurs nearly equal. Fore wing with the apex produced and outer margin oblique, the cell very long, vein 3 from before angle, 4, 5 well separated at origin, male with a hyaline vesicle beyond upper angle below veins 6, 7, which are stalked. Hind wing with the cell very long, vein 3 from near angle, 4, 5 from angle, 6, 7 shortly stalked.

4241. Thyridophora furia, Swinh P Z, S 1884, p 519, pl 47, fig 13, C & S no 1901

Thyridophora fenestrata, Wari P Z S 1888, p 311, C & S no 1773 B



Fig 25 - Thyridophora furia, 5 4.

of. Dull ochreous, more or less suffused with fuscous Fore wing with traces of oblique dark medial line and oblique line from apex.

Hab Aden, Campbellpur; Karáchi Ewp. 14 millim.

Genus LEUCOIDES

Leucoides, Hmpsn Ill. Het. 1x, p 167 (1893).

Type, L fuscicostalis, Hmpsn.

Range Ceylon

Palpi porrect, slightly scaled, and extending about twice the length of head, maxillary palpi long and somewhat dilated at extremity, from produced and acute, antennæ of male minutely serrate and cliated, legs long and slender, the outer spurs about two-thirds length of inner, abdomen long, wings long and narrow. Fore wing with the apex produced and acute, the outer margin oblique, vein 3 from angle of cell, 4, 5 stalked, 6 from upper angle, 7, 8, 9 stalked, 10 free, 11 becoming coincident with 12 Hind wing with vein 3 from near angle of cell, 4, 5 stalked, 6, 7 stalked.



Fig 26 -Leucoides fuscicostalis, & }

4242. Leucoides fuscicostalis, Hmpsn Ill. Het ix, p 108, pl 172, fig 18

d. Pure white; palpi, sides of frons, and fore legs rufous. Fore

wing with the costal area fuscous brown, traces of ante- and postmedial series of rufous specks on the veins.

Hab. Ceylon. Exp. 20 millim.

Genus RAMILA.

Ramila, Moore, P Z S 1867, p. 667 Crambostema, Swinh Trans Ent Soc 1890, p 292

Type, R marginella, Moore

Range India; Ceylon, Burma; Borneo; Australia

Palpi porrect and slightly scaled, the 3rd joint downcurved; maxillary palpi dilated with scales, and nearly as long as the labial, frons produced to a rounded projection nearly as long as the palpi, antennæ ciliated, tibiæ slightly hairy, the spurs short. Fore wing with the apex produced to a point, vein 3 from before angle of cell, 4, 5 from angle, 6 from near upper angle, 7, 8, 9 stalked; 11 becoming coincident with 12 Hind wing with vein 3 from before angle of cell; 4, 5 from angle, 6, 7 stalked.

4243. Ramila marginella, Moore, P Z. S 1867, p 667, pl 33, fig 16, C & S no 4660

Silvery white; palpi and sides of frons fulvous and fuscous.



Fig 27 —Ramila marginella, 8

Fore wing with the membrane crenulated, the costa fulvous and fuscous, a speck at middle of cell conjoined to the costal fascia; two discocellular specks; both wings with an oblique dark line from lower angle of cell to inner margin; a

slight sinuous postmedial oblique line, a marginal black line; the cilia orange, with a black line through them from apex to vein 2 of hind wing.

Hab. Sikhim. Exp, & 48, 2 56 millim.

- 4244. Ramila ruficostalis, Hmpsn Ill Het ix, p 166, pl 173, fig 22.
- o. Differs from marginella in the costa of fore wing being brilliant ferruginous red; the lines ferruginous and interrupted, the medial line of fore wing arising from the speck at middle of cell, the cilia without a black line through them, and the marginal line more maculate on fore wing.

Hab. Ceylon Exp. 30 millim.

- 4245. Ramıla angustıfimbrialis, Sunnh Trans Ent Soc 1890, p 293, Warr A M. N H (6) 1x, p 430
- J. Differs from marginella in the metathorax being yellow. Fore wing with the membrane non-crenulate, the lines obsolescent, the marginal line more maculate.

Hab. Rangoon. Evp. 20-26 millim.

4246 Ramila accusalis, Wik Cat xix, p 977, Moore, Lep Ceyl m, pl 184, f 5, C & S no 4658

Differs from marginella in the membrane of fore wing being non-crenulate, the costal fascia more orange, the lines orange, the medial line arising from the spot at middle of cell, a single discocellular lunule, the postmedial line excurved to outer angle, the marginal line more maculate

Hab. Sikhim, Ceylon, Borneo Exp 26 millim

Genus EURYCRASPEDA

Eurycraspeda, Swinh Trans Ent. Soc 1890, p 284

Type, E bus manalis, Swinh,

Range Burma

Palpi porrect, slightly scaled, and projecting about twice the length of head, maxiliary palpi long and dilated with scales at extremity, antennæ ciliated, abdomen long, with lateral trifts of hair towards extremity, wings long and narrow. Fore wing with vein 3 from before angle of cell, 4 and 5 well separated at origin, 7 straight and well separated from 8 and 9. 11 becoming coincident with 12. Hind wing with vein 3 from before angle of cell, 4 and 5 well separated at origin, 6 and 7 stalked

4247. Eurycraspeda burmanalis, Swinh Trans Ent Soc 1890, p 285, pl 7, hg 19

d. Head, thorax, and abdomen black-brown and white Fore



Fig 28
Eurycraspeda burmanalis, 3

wing black-brown, the inner basal area white, a broad sub-marginal white band with dentate edges traversed by a minutely dentate black line and leaving a dentate black marginal band. Hind wing with the basal two-thirds pale tuscous except the inner area, and with a diffused black patch on

inner area at its outer edge, the outer area white, the cuba fuscous from apex to vein 2

Hab. Burma Exp 20 millim.

Genus BRIHASPA.

Brihaspa, Moore, P Z S 1867, p 666

Type, B. atrostigmella, Moore

Range Brazil, S Africa, NE India, Burma

Palpi poriect, clothed with rough hair, and extending about twice the length of head maxillary palpi long and dilated with scales at extremity; from with a shaip tuft, antenne of male minutely serrate and ciliated, tibize with the outer spurs about

two-thirds length of inner Fore wing broad, the apex rounded, vein 3 from before angle of cell, 4, 5 well separated at origin, 7 straight and well separated from 8, 9, 10, which are stalked, 11 becoming coincident with 12 Hind wing with vein 3 from before angle of cell, 4, 5 well separated at origin, 6, 7 on a long stalk and 7 anastomosing with 8 almost to apex

- 4248. Brihaspa atrostigmella, Moore, P Z S 1867, p 666, pl 33, fig 13, C & S no 4657
 - d. White; palpi and fore legs black, antennæ ochreous Fore



Fig 29 —Brihaspa atrostigmella, d

wing with black fascia on base of costa sometimes curving round and joining the antemedial spot, subbasal and antemedial black spots below costa, a black spot at each angle of cell and one below vein 2 Hind

wing with yellow spot below lower angle of cell, a submarginal spot on vein 2 and one at anal angle

Hab Sikhim, Moulmein, Rangoon Exp. 42-54 millim.

4249 Brihaspa bisangulata, Hmpsn P Z S 1895, p 910

White Fore wing with indistinct interrupted fulvous subbasal band, an oblique fulvous band from costa to discocellulars, where it is met by a V-shaped fulvous mark on outer part of costa, its apex on vein 5, and by a band running from apex to vein 3, then recurved to discocellulars, a large fusious patch between lower angle of cell and inner margin. Hind wing with the discal area from before middle to near outer margin occupied by a fuscous patch, becoming fulvous on subapical area.

Hab Sikhim Eap. 18 millim

Genus PATISSA

Patissa, Moore, Lep Ceyl 111, p 388 (1886)

Type, P lactealis, Feld

Range Nearctic and Neotropical regions, S Africa, Japan,

India, Ceylon, and Buima, Java

Palpi porrect, clothed with rough hair, and extending about the length of head, maxillary palpi dilated with scales, frons with a slight tuft, antennæ of male minutely serrate and ciliated, legs long and slender, the outer spurs about two-thirds length of inner. Fore wing with the apex somewhat produced and outer margin oblique, vein 3 from before angle of cell, 4, 5 well separated at origin; 7 straight and well separated from 8 9, 10, which are stalked, 11 becoming coincident with 12 Hind wing with vein 3 from before angle of cell, 4,5 well separated at origin, 6,7 stalked

4250. Patissa latifuscalis, Hmpsn P Z S 1895, p 911.

2 White; palpi and pectus fuscous black. Fore wing with the costal area fuscous black, a basal black patch not reaching inner margin, a medial black band very wide on costa and extending nearly to apex, narrowing to inner margin, a series of black spots on the ciha. Hind wing with diffused fuscous postmedial line, developed into a patch on middle of inner margin

Hab. Sibsagar. Esp. 26 millim.

4251 Patassa lactealis, Feld Reis Nov. pl. 187, fig. 38, C & S no 4666

d. White irrorated with fuscous brown Fore wing with obscure subbasal brown line, prominent curved antemedial line.



Fig 30 —Patissa lactealis, &

the postmedial line nearly straight from costs to vein 3, then recurved to costa and enclosing two black spots on discocellulars in a figure-of-8 shaped mark, angled outwards on vein 2, and oblique to inner margin, a minutely dentate submarginal brown line and series of specks on

the cilis Hind wing pure white, with a brown lunule on inner margin above anal angle, and brown line from vein 2 to inner

margin near anal angle

2. Much less irrorated with brown Fore wing with the retracted figure-of-8 shaped portion of the postmedial line and discocellular specks obsolescent, the submarginal line white. Hind wing pure white.

Hab. Nilgiris; Ceylon Exp., of 20, 2 22 millim

4252. Patissa fulvosparsa, Butl. Trans Ent Soc 1881, p 591 Metasia candidulalis, Swinh. P Z S 1885, p 880, pl 57, fig 6, C & S no 4665 Donacaula chlorosema, Meyr Trans Ent Soc 1894, p 11 Patissa tortualis, Snell Trid v Ent. 1893, p 58, pl 3, fig 3

Fore wing with obscure yellow curved subbasal and antemedial lines, the postmedial yellow line straight from costa to vem 5, retracted almost to costs in the form of a figure of 8 with a black spot at lower angle of cell, angled on vein 2 and oblique to inver margin, a curved submarginal yellow band. Hind wing white, with slight yellow marks on inner and outer margins near anal angle.

Hab Japan, Dharmsála; Kúlú, Poona; Nilgiris, Shan States;

Java. Eap, of 18, 2 20 millim.

4253. Patiesa erythrozonalis, Hmpsn P Z S 1895, p 911

Pure white; palpı and fore legs slightly tinged with fulvous.

Fore wing with slightly oblique ferruginous band from upper angle of cell to inner margin; three ferruginous specks below costa towards apex and a marginal series of specks

Hab. Meean Meer, Punjab, Nilgiris, Ceylon. Exp. 14 millim.

4254. Patissa luteifrons, n sp.

3 Silky white; palpi, frons, and basal joint of antennæ fulvous yellow, antennæ serrated with brown; abdomen and legs tinged with yellow, the latter fuscous above. Fore wing with the costa narrowly fulvous yellow.

Hab. Calcutta (Atkinson). Exp 28 millim. Type in B. M.

4255 Patissa virginea, Zell Mon Chil. & Cramb p 2
Crambus multivagellus, Swinh P Z S 1886, p 462, C. & S.
no 4698

Pure white, palpi and legs slightly tinged with fulvous. Fore wing sometimes with black speck at upper angle of cell.

Hab. S. Africa; Mhow; Nilgiris, Ceylon. Exp. 22 millim.

4256 Patissa curvilinealis, Hmpsn P Z S 1895, p 912

Yellowish white, palpi and antennæ tinged with rufous. Fore wing with the basal two-thirds of costa reddish brown; a curved brown line from costa near apex to near base of inner margin; a marginal brown line. Hind wing white, with faint traces of an oblique medial brown line and a tine marginal line.

Hab Ceylon (Pole). Exp, & 12, & 18 millim.

Genus SCIRPOPHAGA.

Scirpophaga, Treitschle, Schmett Eur 1x, 1, p 55 (1832) Apurima, Will Cat axvii, p 194 (1863)

Type, S prælata, Scop, from Europe. Range Universally distributed

Palpi porrect, extending from once to twice the length of head, slightly clothed with hair, and with the 3rd joint downcurved; maxillary palpi rather short and dilated with scales, a slight rounded frontal projection, antennæ of male minutely serrated, ciliated, patagia of male with spreading upturned hair, tibiæ with the outer spurs about half the length of inner, abdomen long, in female expanding at extremity and with very large anal tuft, wings long and narrow. Fore wing with vein 3 from before angle of cell, 4,5 from angle; 7 straight and well separated from 8,9; 10 and 11 free, or 11 becoming coincident with 12 Hind wing with vein 3 from near angle of cell; 6, 7 from upper angle.

SECT. I. Hind wings with veins 4, 5 well separated at origin.

4257. Scirpophaga auriflua, Zell Mon Chil & Cramb p 2, C & S no 4655

Apurima xanthogastrella, Will Cat xxvii, p 194, Moore, Lep

Ceyl m, pl 184, fig 14, C & S no 4654 (part) Scirpophaga intacta, Snell Tyd v. Ent 1891, p 343, pl xviii,

Pure white; the anal tuft orange, sometimes brownish in the female, or in the form intacta rosy pink

Hab Congo, Shanghai, throughout India, Ceylon, and Burma; Borneo; Java Erp, & 28-30, Q 24-50 millim.

- 4258 Scirpophaga monostigma, Zell Mon Chil & Cramb p 3
- d. Differs from auriflua in the fore wing having a black spot at lower angle of cell Hab. Campbellpur; Bhután. Erp. 22-30 millim.

4259. Scirpophaga chrysorrhoa, Zell Mon Chil & Cramb p 1 Tipanæa innotata, Will Cat xxviii, p 523.

Differs from auriflua in the fore wing being suffused with pale golden yellow

Hab. China, Mergui, Borneo, Java; Ceram. Erp., & 30, ♀ 30-38 millim

4260. Scirpophaga gilviberbis, Zell Mon Chil & Cramb p 2, C&S no 4656 Scirpophaga fusciflua, Hmpsn. Ill Het ix, p 167, pl 172, figa 29, 30

Differs from auriflua in the outer hairs of the anal tuft being white, the inner brown, underside of fore wing in male suffused with fuscous

Hab Calcutta; Nilgiris; Ceylon, Burma. Eip, & 16-18, ♀ 18–24 millim.



Fig 31 - Scirpophaga excerptalis, & }.

4261. Scirpophaga excerptalis, Will Cat xxvn, p 142, C & 8

Differs from gilvibeibis in its larger size Hab. China; N.W Himalayas, Borneo Exp & 24-30, Q 30-38 millim

4262 Scirpophaga bisignata, Swinh P Z S 1885, p. 878, C & S. no 4662

Brownish ochreous Fore wing with black spots at lower angle of cell and on middle of vein 1, traces of a speck on vein 1 towards outer angle Hind wing whitish

Hab. Karachi, Poona, Mhow, Calcutta. Eap. 16 millim.

SECT II Hind wings with veins 4, 5 closely approximated for some distance, or stalked

4263 Scirpophaga cramboides, Will Cat xxxi, p 230, C. & S no 4654 (part)

d Yellowish, palpi orange; legs fulvous Fore wing with the costa orange; underside of fore wing suffused with fuscous

Q White, slightly sullied with fuscous, palpi fulvous underside of fore wing and costa of hind wing suffused with fuscous Hab Simla, Dharmsála Exp., 3 26, Q 34-36 millim.

Genus SCHŒNOBIUS

Scheenobius, Dup Cat Lép Eur p 312 (1844) Catagela, Wik Cat xxvii, p 191 (1863) Panahpa, Moore, Lep Ceyl 111, p 386 (1886) Microscheenis, Meyr Trans. Ent Soc 1887, p 270

Type, S quantellus, Schiff, from Europe. Range Universally distributed

Palpi porrect, roughly scaled, the 2nd joint two to three times, the 3rd about length of head, maxillary palpi dilated with scales; froms with a slight tuft, antennæ of male minutely serrate and ciliated, legs long, tibiæ with the outer spurs about two-thirds length of inner, abdomen long, in female dilated at extremity and with a large anal tuft, wings long and narrow. Fore wing with the apex rounded in male, more produced in female, vein 3 from before angle of cell, 4, 5 from angle, 7 straight and well separated from 8, 9, 10, 11 free, or 11 becoming coincident with 12. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 shortly stalked, 7 anastomosing slightly with 8 or free

SECT I. (Panalipa) Palpi with the 2nd joint about twice the length of head

4264 Schænobius immeritalis, Wil. Cat xix, p 830, C & S. no 4689
Araxes decursella, Wilk Cat xxvii, p 194

of Bright ochreous yellow, hind wing paler.

2 Paler ochreous or straw-yellow, the anal tuft fulvous. Hind wing whitish

Hab Dharmsála, Calcutta, Ceylon, Siam. Exp., 14-20, ♀ 14-28 millim.

SECT. II. (Schonobius) Palpi with the 2nd joint about three times length of head.

4265. Schenobius bipunctifer, Wik. Cat xxvin, p 528, Moore, Lep. Ceyl in, pl 184, fig 13, C. & S no 4661
Chilo gratiosellus, Wik. Cat xxx, p 967
Scheenobius punctellus, Zell Mon. Chil & Cramb p 4



Fig 32 - Schanobius dipunotifer, Q. 1.

2. Head, thorax, and abdomen yellowish white Fore wing suffused with orange-yellow; a black spot at lower angle of cell. Hind wing white, often tinged with yellow towards outer margin,

Hab. China, Formosa; throughout India, Ceylon, and Burma; Sumatra; Java; Borneo. Evp. 24-36 millim.

- 4266. Schenobius dodatellus, Wilk. Cat. xxx, p. 966; C & S no 4671. Chilo aditellus, Wilk. Cat. xxx, p. 967.
- d. Head and thorax ochreous, suffused with coppery red; abdomen ochreous Fore wing ochreous, thickly streaked with coppery red; the costal area fuscous to near apex, a diffused fuscous streak on median nervure and vein 5, bent up to apex; two black spots on discocellulars, a speck at origin of vein 2, and three specks on vein 1; a marginal series of black specks. Hind wing white.

2. Usually with the fore wing much less prominently streaked with red.

Hab Japan, Khásis; Ceylon; Moulmein; Rangoon. Eup., of 24, Q 26-40 millim.

- 4267. Schoenobius adjurellus, Wik Cat. xxvn, p. 191, C. & S no. 4682 Schoenobius brunnescens, Moore, Lep. Atk p. 225, C & S. no 4663
- d. Head, thorax, and fore wing glossy reddish brown, the last with dark specks below middle and at lower angle of cell, an obliquely curved, minutely dentate dark line from costa just before apex, becoming obsolescent towards middle of inner margin, a marginal series of dark specks; abdomen and hind wing pale, the latter with the apical area brownish.

Hab. Assam, Calcutta; Ceylon. Exp 20-24 millim.

- 4268. Schenobius incertellus (incertulas), Wik Cat xxvii, p 143. Catagela admotella, Wik Cat xxvii, p 192, C & S no 4683. Schenobius minutellus, Zell. Mon Chil & Cramb p 6.
 - d. Brownish ochreous. Fore wing irrorated with dark scales

and the veins slightly streaked with fuscous; a black spot at lower angle of cell, an oblique fuscous line from apex to vein 2; a marginal series of black specks. Hind wing ochreous white.

2. Fuscous brown; the hind wing pale fuscous

Hab Nágas; Calcutta, Ceylon; Rangoon; Borneo; Java. Exp, & 18-22, \, 34 milim

- 4269. Schenobius auristrigellus, Hmpsn. P. Z S 1895, p 916
- 6. White, palpi and shoulders golden yellow; abdomen slightly tinged with fuscous and with a dorsal yellow patch on 1st segment. Fore wing with golden-yellow fasciæ in the interspaces, a black spot at lower angle of cell, an oblique yellow line from apex to middle of inner margin. Hind wing pure white.

 Hab. Bhután Eap. 24 millim

- 4270 Schenobius costalis, *Moore*, *Lep Ceyl* 11, p 388, pl 184, fig 15, C & S. no 4653
- d Almost pure shining white, palpi pale rufous, pectus and legs fuscous. Fore wing with the costa black, underside of fore wing suffused with fuscous

Hab Ceylon Exp 28 millim.

Genus CIRRHOCHRISTA.

Cirrhochrista, Led Wien ent. Mon. 1863, p 440.

Type, C ætherialis, Led, from Amboina and Ternate Range Japan, Oriental region to N Australia

Palpi porrect, thickly clothed with hair, the 3rd joint hidden by hair and downcurved, maxillary palpi long and triangularly scaled at extremity, frons oblique, antennæ ciliated, tibiæ clothed on outer side with rough hair, the outer spurs less than half the length of inner. Fore wing with the apex produced, the outer margin oblique, veins 3, 4, 5 from angle of cell, 7 curved and very closely approximated for a short distance to, or well separated from, 8, 9, to which 10 also is approximated. Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 shortly stalked.

- SECT I Palpi projecting about the length of head and with a tuft of porrect hair from 1st joint.
- 4271. Cirrhochrista pulchellalis, Led. Wien. ent Mon 1863, p. 441, pl 17, fig 10
 Cirrhochrista ætherialis, Hmpsn Ill Het. ix, p 46 (nec Led).

White, palpi, antennæ, collar, and shoulders fulvous; abdomen with dorsal maculate band, the spots on 1st two segments small, then very large. Fore wing with the costa fulvous, an outwardly oblique dark-edged fulvous antemedial band expanding on inner margin, a dark-edged triangular fulvous patch from VOL. IV.

middle of costa extending to lower angle of cell; an oblique



Fig 33 — Cirrhochrista pulchellalis, o

fulvous dark-edged band across the apex, a fulvous and dark marginal band with sinuous inner edge and expanding into a large patch at outer angle. Hind wing with dark marginal band and the ciha orange between veins 6 and 2.

Hab. Ceylon; Java, Amboina Exp 30 millim.

4272. Cirrhochrista semibrunnea, Hmpsn. P Z S 1895, p 918

Q. Head brown with the vertex white, thorax and abdomen brown, the middle of collar, patagia, and sides of basal segment of abdomen white. Fore wing brown, with a large white patch on basal inner area, a large crescentio white mark in cell and much larger similar mark beyond the cell; a quadrate apical white patch, a yellow discocellular line and series of yellow marginal marks below the apical patch. Hind wing white; a large round brown submarginal spot between veins 2 and 3, some yellow on medial part of margin, a brown marginal line, cilia fulvous at base, inner area tinged with fuscous.

Hab Bhután. Exp. 36 milim.

SECT. II. Palpi projecting about twice the length of head and with no tuft from basal joint

4273. Cirrhochrista brizoalis, Wik Cat xix, p 976, Moore, Lep Atk. pl 7, fig 10; C & S no 4659
Cirrhochrista figuratalis, Wik. Cat xxxiv, p 1369.

Differs from pulchellals in the dorsal maculate band being reduced or altogether absent. Fore wing with triangular spot from costs replacing the antemedial band, the oblique line across apex interrupted and obsolescent; the marginal band not expanding at outer angle. Hind wing with the marginal band narrow and extending nearly to anal angle.

Hab Japan; China, Formosa; N.W. Himalayas; Bombay; Nilgiris; Borneo; Celebes, Australia. Exp 22-28 millim.

4274. Cirrhochrista fumipalpis, Feld. Ress Nov. pl 185, fig. 31.

Yellowish white, palpi rufous; abdomen with rufous and silvery lateral marks towards extremity. Fore wing with the costs orange and fulvous with a silver line on it; an outwardly-oblique antemedial fulvous and orange line, a triangular fulvous and orange patch with silvery marks on it from costs to lower angle of cell, giving off from its apex a sinuous line to inner margin and oblique

streak to outer margin above outer angle, the two connected by a streak which is also connected with outer angle, an oblique orange and fulvous line across apical area, a marginal orange and fulvous band with a silver line Hind wing white with slight orange marginal specks

Hab Sikhim; Nágas, Burma, Moluccas. Evp 32 millim

4275 Cirrhochrista bracteolalis, Hmpsn Ill Het viii, p 135, pl 155, fig 3

Head and thorax white, palpi and abdomen above fuscous. Fore wing white suffused with fuscous brown, a white patch at base not reaching costa, a silvery fascia below base of costa; an incurved silvery antemedial band, a silver spot at upper angle of cell, a postmedial sinuous series of spots; three silvery spots below costa with an orange streak and white patch from them to apex, a marginal series of silver specks Hind wing white.

Hab. Sikhim; Nilgiris; Ceylon Exp. 30 millim.

Subfamily ANERASTIINÆ.

Proboscis absent or minute Fore wing with vein 1 a separate from 1 b, 7 absent Hind wing with the median nervure pectinated above, vein 7 usually anastomosing with 8.

Key to the G enera.	
A Hind wing with two veins arising from median nervire	
a Palpi upturned * b Palpi porrect	1 Menuthia, p 52. 2 Calfra, p. 52.
B Hind wing with three veins arising from median nervire	2 (AMF EA, p. 02.
a Fore wing with three veins arising from median nervure	
a' Fore wing with vein 10 stalked with 8,9	
a ² Fore wing with vein 5 from above angle of cell, 2 from near angle	3 Ambala, p 53
62. Fore wing with vein 5 from angle of	[p 54.
cell, 2 from well before angle	4 HYPSOTROPHA,
b'. Fore wing with vein 10 from the cell .b. Fore wing with four veins arising from median nervure	5. Anerastia, p. 55
 a' Forewing with vein 10 stalked with 8, 9 b'. Fore wing with vein 10 from the cell 	6 PATNA, p 57.
a ² Fore wing with veins 4, 5 stalked	7. Poujadia, p 58
	

^{*} In one specimen vein 4 of the bind wing is given off just before the margin

b. Fore wing with veins 4, 5 from the C Hind wing with four veins arising from median nervure

8 CRITO. TA, p 60.

9. Polyocha, p 61.

Genus MENUTHIA.

Menuthia, Rag. Nouv Gen p 50 (1888)

Type, M nanella, Rag. from Zanzibar. Range E. Africa, Ceylon.

Palpi slender, upturned, and reaching above vertex of head; maxillary palpi absent; from rounded, antennæ of male somewhat thickened, mid and hind tibis fringed on outer side with rough hair. Fore wing with vein 2 from near angle of cell; 4 absent, 10 given off from 8, 9 Hind wing with yeins 2 and 5 from angle of cell, 3, 4 absent, or 4 rarely given off from 5 just before the margin, 6, 7 stalked, 7 anastomosing with 8

In the typical section veins 3, 5 of fore wing are stalked.

SECT II Fore wing with veins 3, 5 from cell.

4276 Menuthia fissirella, n sp

d. Head and thorax whitish irrorated with brown; abdomen



Fig 34 -Menuthia fissirella, J. . .

pale ochreous at base wing white irrorated with brown, the veins white; a brown streak below median nervure. Hind wing pure white.

In one specimen vein 4 of hind wing is given off just before the margin

Hab Hambantota, Ceylon (Pole) Exp 14 millim. Type in B.M.

4277. Menuthia discipunctella, n sp

Fore wing irrorated with fuscous; obliquely d. Ochreous placed antemedial black spots on median nervure and inner margin; a prominent black spot at lower angle of cell; an oblique submarginal black line bent outwards to apex; a marginal series of black specks Hind wing white, the apex tinged with fuscous.

Hab Ceylon (Pole). Exp. 12 millim. Type in B. M.

Genus CALERA.

Calera, Rag Now. Gen p 50 (1888)

Type, C. punctilimbella, Rag., from N. America.

Range. Nearctic region, S. India

Palpi porrect, extending about twice the length of head, the 3rd wint downcurved and acute, maxillary palpi filiform; froms with a large conical tuft, antennæ of male somewhat thickened. Fore wing long and narrow, vein 2 from close to angle of cell; 4 absent, 10 arising from 8, 9 Hind wing with veins 2 and 5 from angle of cell, 3 and 4 absent, 7 anastomosing with 8.

In the typical section veins 3, 5 of fore wing and 6, 7 of hind

wing are stalked.

SECT. II. Fore wing with veins 3, 5, hind wing with veins 6, 7 from cell.

4278 Calera rosella, n sp

Anerastia virginella, Hmpsn. Ill Het viu, p. 41 (nec Meyr).



Fig 35 — Calera rosella, Q

Q. Head and thorax pale rose-pink; abdomen ochreous white Fore wing pale rose-pink, the veins streaked with white. Hind wing yellowish white.

Hab. Nilgiris (Hampson) Exp. 24 millim. Type in B M.

Genus AMBALA.

Ambala, Rag Nouv Gen p 45 (1888)

Type, A fuscostrigella, Rag. Range S. Africa, NW India.

Palpi oblique and reaching above vertex of head, the 2nd joint in male hollowed out to receive the brush-like maxillary palpi; antennæ of male with long uniseriate branches, a sinus at base of shaft with a large ridge of scales in it; mid and hind tibiæ fringed with hair on outer side. Fore wing with vein 2 from near angle of cell; 3 and 5 well separated at origin; 4 absent; 8, 9, 10 stalked. Hind wing with vein 2 from close to angle of cell; 4 absent; 3 and 5 stalked, 6, 7 from upper angle; 8 free

- 4279. Ambala fuscostrigella, Rag Nouv Gen p 45; id Mon Phyc pl xxxviii fig 10, C & S no 4627
 - d. Head and thorax ochreous white, abdomen ochreous.

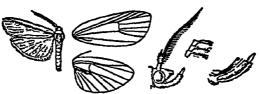


Fig 36 — Ambala fuscostrigella, 3

Fore wing yellowish white, with a broad costal white fascia not reaching the apex, the area below it suffused with rufous brown;

a marginal series of dark specks. Hind wing white, the apical part of costa tinged with rufous

Hab. Punjab. Exp 28 millim

Genus HYPSOTROPHA.

Hypsotropa, Zell Isis, 1848, p 591. Heosphora, Meyr P Linn Soc N S W vii, p. 158 (1882) Talamba, Rag Nouv Gen p 47 (1888)

Type, H limbella, Zell, from Europe

Range Europe, S Africa, Syria, Amur, India, Australia. Palpi extending three or four times length of head and fringed with hair above, in male with the second joint hollowed out to receive the brush-like maxillary palpi, antenna of male with a sinus at base containing a ridge of scales. Fore wing with vein 2 from well before angle of cell, 4 absent, 3 and 5 from angle, 8, 9, 10 stalked. Hind wing with vein 2 from near angle of cell, 4 absent, 3, 5 stalked, 6, 7 from upper angle

SECT I Hind wing with vein 7 anastomosing with 8

A (Hypsotropha). Palps obliquely upturned

a Male unknown

- 4280. Hypsotropha sceletella, Zell. Stettin ent Zeit 1867, p 404; Rag Mon Phyc pl xhv, fig 22, C & S no 4630
- Q Head and thorax pale pink, abdomen ochreous with a fuscous tinge. Fore wing white; the veins strongly defined by pink lines. Hind wing white.

 Hab Calcutta. Exp. 30 millim.
- b Antenace of male with long unservate pectinations on basal third, the medial third ciliated, the distal third with short branches

4281 Hypsotropha heterocerella, n sp

Head and thorax grey and brown, abdomen ochreous, suffused

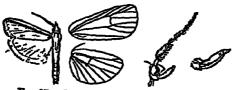


Fig 37 —Hypsotropha keterocerella, &

with fuscous towards extremity. Fore wing white, thickly irrorated with brown, the costal fascia rather whiter and defined

by a reddish-brown subcostal fascia, traces of a marginal series of dark specks. Hind wing white

Hab Meean Meer, Punjab (Harford). Exp 18 millim Type

m B M.

B (Heosphora) Palp porrect.

- 4282. Hypsotropha laterculella, Zell Stettin ent Zeit 1867, p 403;
 Rag Mon Phyc pl xliv, fig 21, C & S no 4628
- Q. Head and thorax rufous, abdomen whitish tinged with brown Fore wing yellowish rufous suffused with pink, a white costal fascia irrorated with pink and narrowing to apex, traces of a discocellular dark speck and series of postmedial specks Hind wing white with a yellowish tinge

Hab Calcutta Exp 26 millim

SECT II. (Talamba) Hind wing with vein 8 free

- 4283. Hypsotropha tenunervella, Rag Nouv Gen p 47, 1d Mon Phyc pl xl, fig 25, C & S no 4629
- Q Head and thorax white suffused with very pale pink; abdomen ochreous Fore wing white irrorated with pink; the veins defined by fine pink lines Hind wing pinkish white Hab Punjab, Nilgiris Evp 24-32 millim

Genus ANERASTIA.

Anerastia, Hubn Yerz p 367 (* 1818) Comorta, Rag Nouv Gen p 48 (1888)

Type, A lotella, Hubn, from Europe

Range Neotropical, Palæarctic, Oriental, and Australian regions Palpi of female poirect, extending about twice the length of head and thickly scaled, antennæ of male thickened and flattened. Fore wing long and narrow, vein 4 absent, 5 from angle, 10 free. Hind wing with vein 2 from angle of cell, 4 absent, 3 and 5 stalked, 6, 7 stalked, 7 anastomosing with 8

SECT I (Anerastia) Palpi of male porrect, maxillary palpi absent, antennæ with neither sinus nor ridge of scales at base

A Frons rounded.

- 4284 Anerastia celsella, Will Cat xxvii, p 193, Rag. Mon Phyc. pl xl, fig 7, C & S no 4634
- Q Head and thorax ochreous suffused with pink, abdomen ochreous Fore wing ochreous, the costal area suffused with pink, an antemedial outwardly oblique pink band and inwardly oblique postmedial band, a discocellular speck. Hind wing yellowish white

Hab Ceylon Evp 20 millim

B. From with a long flattened corneous projection more or less buried in scales.

4285. Ansrastia spinifrontella, Rag Nouv Gen p 48, ul Mon Phyc pl xl, fig 2, C & S no 4636



Fig 38
Anerastia epinifrontella, 5

Head whitish, the palpi tanged with brown; throax brown, abdomen ochreous. Fore wing ochreous suffused with reddish brown, especially below the broad costal fascia, which is whitish and narrows to apex. Hind wing white with a slight fuscous tange.

Hab Karáchi Exp, & 18-22, 9 24 millim

4286 Anerastia ablutella, Zell' Isis, 1839, p 177

Anerastia stigmatella, Rag Nouv Gen p 49, id. Mon. Phys pl xl, fig 4, C & 8 no 4637

Ochreons. Fore wing slightly irrorated with fuscous; a dark speek at lower angle of cell. Hind wing white.

The variety stigmatella has a reddish tange and large discocellular

Hab Mediterranean subregion, Punjab Exp. 13-18 milhm

4287 Anerastia pulverulella, n. sp.

d Head white and brown, thorax pale brown, abdomen ochreous Fore wing ochreous, with broad white costal fascia irrorated with fuscous, tapering to apex, its lower edge defined by brown, a prominent dark speck at lower angle of cell, the veins beyond the cell, vein 1, and inner margin white irrorated with fuscous Hind wing white

Hab Puttalam, Ceylon (Pole). Eup. 18 millim. Type in B. M.

- *4288. Anerastia brunneovittella, Rag Nouv Gen p 49, id Mon Phyc pl xl, fig 6, C. & S no 4638.
- 2. Pale ochreous grey Fore wing with the costs narrowly ochreous white, and with a subcostal rufous streak. Hind wing dull semilyaline white.

Hab Bombay. Exp. 18 millim.

- *4289. Antrastia bimaculella, Rag. Nouv. Gen. p. 49, ed Mon. Phyc. pl xl, fig 5, C & S. no 4632
- d Ochreous. Fore wing short, widening towards outer margin, the costal area tinged with rufous, the veins irrorated with a few black scales, a prominent black spot at lower angle of cell, a subbasal black speck on vein 1 Hind wing yellowish grey.

Hab. "S. India." Exp 12 milim.

SECT. II (Comorta). Palpi of male with the 2nd joint hollowed out to receive the brush-like maxillary palpi, antennæ with a sinus at base of shaft containing a ridge of scales

A. Palpi porrect.

4290. Anerastia pallidicosta, n sp

J. Head and thorax rufous; abdomen ochreous. Fore wing suffused with rufous, darkest below the broad pale costal fascia, which does not reach apex. Hind wing yellowish white.

2 usually much redder, the costal fascia often deeply suffused

with red

Hab. Ichang, China; Punjab; Nágas, Ceylon; Burma. Exp. 22 millim Type in B M.

B Palpi upturned

4291 Anerastia nigricostalis, Wlk Cat xxvii, p 40 Comorta atricostella, Rag Nouv Gen p 48, id Mon Phyc pl xxxix, fig 22

Head and collar fuscous black; abdomen rufous Fore wing rufous, with a fuscous black costal fascia; traces of a medial black line, a discocellular spot, and an oblique postmedial line, a marginal series of black specks. Hind wing white, with a slight fuscous tinge and marginal line

Hab. W. Africa, Ceylon, Burma, Andamans; Borneo. Exp.

18 millim.

Genus PATNA

Patna, Rag Nouv. Gen p. 39 (1888).

Type, P. eboricostella, Rag. Range. Sikhim; Bhután

Palpi porrect, extending about twice the length of head, the 2nd joint fringed with hair above at extremity, maxillary palpi filiform, frons rounded; antennæ of female minutely ciliated Fore wing with the costa nearly straight, the apex rectangular; veins 3, 4, 5 from angle of cell, 4, 5 being approximated for some distance, 8, 9, 10 stalked. Hind wing with vein 2 from before angle of cell; 4 absent, 3 and 5 approximated for a short distance; 6, 7 from upper angle; 7 anastomosing with 8.

- 4292 Patna eboricostella, Rag Nouv Gen p 39; id Mon Phyc. pl xxxvii, fig 1, C & S no 4620
- Pinkish irrorated with black. Fore wing ochreous suffused with pink, pink streaks on the veins below costa; two black streaks in cell and an oblique black apical fascia; ill-defined black streaks between the veins beyond lower angle of cell; a

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streak in interno-median interspace, a short streak above middle

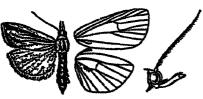


Fig 39 —Patna eboricostella, 🍳 📑

a short streak above middle of vein 1, followed by a white streak on the vein, traces of a submarginal minutely—waved line, very oblique from vein 2 to inner margin Hind wing fuscous brown, the ciba grey

Hab Sikbim , Bhután. Evp 30–32 millim

Genus POUJADIA.

Poujadia, Rag Nouv Gen p 42 (1888) Baroda, Rag Nouv Gen p 42

Type, P. sepicostella, Rag

Range India, Ceylon and Burma, Borneo

Palpi about one and a half times length of head, in male with the 2nd joint hollowed out to receive the brush-like maxillary palpi, from with a tuft of scales, antennæ of male with a sinus at base of shaft containing a ridge of scales, mid and hind time fringed with hair. Fore wing with vein 3 from close to angle of cell, 4, 5 stalked, 10 free Hind wing with vein 2 usually from well before angle of cell, 4 absent, 3, 5 stalked, 6, 7 from upper angle, 8 free.

SECT I (Ponjadia) Palpi oblique

A Antennæ of male serrate the oughout

4293. Poujadia sepicostella, Rag Nour Gen p 42, id Mon. Phyc pl xxxvi, fig 25, C & S no 4623

Head and thorax black-brown; abdomen paler. Fore wing brown, a broad white costal fascia slightly irrorated with pink and narrowing to base and apex, the area below it very dark; traces of an oblique postmedial line Hind wing pale fuscous Hab NW Himalayas, Punjab Exp 26 millim.

4294. Ponjadia inficita, Wik Cat xxvii, p 30, Rag. Mon Phyc pl xliv, fig 18, C & S. no 4685

Differs from sepicostella in the vertex of head and abdomen being ochreous. Fore wing with a narrow costal fascia. Hind wing yellowish white with a slight fuscous tinge. Some specimens have the fore wing paler, the costal fascia somewhat diffused at middle, a dark discocellular spot and curved dark submarginal line.

Hab Allahabad, Mhow, Ceylon Exp 20 millim

- 4295 Ponjadia ochridorsella, Rag Nouv Gen p 42, id Mon. Phyo pl xxxvu, fig 1, C & S no 4622
 - 2. Yellowish white, abdomen bright othreous at base. Fore

wing with whitish costal fascia not reaching the apex, an ill-defined diffused brown subcostal fascia.

Hab. Dharmsála, Ceylon Exp 22-26 millim

4296 Poujadia rosella, n. sp

d Head and thorax pink; abdomen ochreous Fore wing bright pink, a white costal fascia narrowing to base and apex and slightly irrorated with pink, the area below it suffused with chestnut. Hind wing white, with slight fuscous tinge at apex.

Hab. Nilgiris (Hampson) Exp. 20 millim Type in B M.

- 4297. Poujadia spurcella, Rag Nouv Gen. p 742, id Mon Phyc pl. xxxvn, fig. 4, C & S. no 4624
- d. Red-brown, abdomen ochreous. Fore wing very narrow, with the medial part of costa whitish, a dark discocellular spot Hind wing yellowish white.

Hab Allahabad; Shan States; Labuan. Evp 20 millim.

B. Antennæ of male with the distal third pectinated with uniseriate branches. Hind wing with vein 2 from near angle of cell

4298. Poujadia parviplumella, n sp

d Head and thorax pale red-brown, abdomen whitish, ochreous towards base. Fore wing ochreous suffused with pale



Fig 40—Poujadia parviplumella, d

rufous and irrorated with black; a pale costal fascia defined by fuscous on its lower edge; an outwardly oblique antemedial black band on inner area, a discocellular speck; an inwardly oblique post-

medial band from the costal fascia to inner margin Hind wing white.

Hab Meean Meer, Punjab (Harford) Evp 22 millim. Type in B. M

C. Antennæ of male with long uniseriate branches

- *4299. Ponjadia erodella, Rag Nouv Gen p 42, id Mon Phyc. pl. xxxvii, fig. 5, C & S no 4621
- o. Reddish ochreous Fore wing narrow, irrorated irregularly with black except on costa; a subcostal dark streak and traces of ante- and postmedial dark lines, a marginal series of specks. Hind wing pale yellowish

Hab "S. India" Evp. 20 millim

- SECT. II (Baroda) Palpi porrect, antennæ of male with long uniseriate branches.
- 4300 Poujadia opificella, Zell Stettin ent Zeit 1867, p 406, Rag Mon Phye pl xliv, tig 16, C. & S no 4625
- 2. Head, thorax, and fore wing uniform ochreous tinged with pink, the last very narrow and sometimes with traces of ante- and postmedial lines on inner area, abdomen ochreous. Hind wing pure white

Hab Calcutta; Burma Exp 24 millim

4301. Poujadia paucigraphella, Rag Nouv Gen p 42, ed Mon. Phyc pl xxxvm, fig 5, C & S no 4626

Head, thorax, and fore wing ochreous with a slight pinkish tinge, abdomen ochreous. Fore wing with slight fuscous irrora-tion, traces of ante- and postmedial dark lines, a dark discocellular speck. Hind wing whiter, with a yellowish tange Hab Sind, Bombay, Calcutta. Exp 18-26 millim

4302 Poujadia pulverosa, n. sp

Q. Grey tanged with ochreous and irrorated with fuscous. Fore wing with white streaks on median nervure and vein 1; a curved antemedial series of dark marks on the veins and oblique postmedial series Hind wing white

Hab Sind (Swinhos) Exp 24 millim. Type in B. M.

Genus CRITONIA.

Critoma, Rag MS

Type, O subconcunnella, Rag. Range India, Ceylon, and Burma

Palpi porrect, extending about twice the length of head and downcurved at extremity, maxillary palpi filiform, frons with a tuft of scales, antennæ of male with short uniscriate branches, a smus at base of shaft containing a ridge of scales. Fore wing with vein 3 from before angle of cell, 4, 5 from angle, 10 free Hind wing with vein 2 from before angle of cell; 4 absent, 3, 5 from angle, 6, 7 from upper angle; 8 free

4303. Critonia sarcoglauca, n sp

2. Head and thorax pale and dark grey; abdomen grey with an ochreous tinge Fore wing pale grey irrorated with dark grey, the base dark grey; an oblique antemedial dark grey band with waved line on its outer edge, a prominent discocellular spot; a minutely waved white postmedial line defined by dark grey on either side and slightly bent outwards between veins 6 and 2; a marginal series of dark specks. Hind wing pale fuscous, the culta white.

The dark grey areas of fore wing are often suffused with fleshpink.

Hab. Ceylon (Green, Pole). Exp 22-28 millim Type in B M.

4304 Critonia purpureotineta, n sp

Q. Brownish flesh-colour. Fore wing with the costal and inner areas broadly suffused with pale purple and irrorated with black, the dark inner area not reaching the outer angle; dark specks on veins 2 and 3 beyond lower angle of cell, a marginal series of dark specks Hind wing pale ochreous, the cilia grey Hab. Bhután (Dudgeon) Exp 38 millim Type in B M

4305. Critonia roseistrigella, n sp

d. Head and thorax rose-pink, abdomen whitish with slight

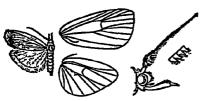


Fig 41 - Critoma voseistrigella, d. 1

ochreous tinge Fore wing rose-pink, the veins with dark streaks, a white costal fascia narrowing to base and apex, and suffused with pink on costa, the area below it slightly suffused with fuscous. Hind wing whitish, the margin and apical area tinged with fuscous.

Hab Nilgiris (Hampson) Exp. 22 millim Type in B M

4306. Critonia subconcinnella, Rag MS

Q. Head, thorax, and fore wing bright pink, abdomen ochreous white Fore wing with white costal fascia narrowing to base and apex, the area below it suffused with fuscous; a whitish spot in end of cell conjoined to the costal fascia, traces of waved ante-and postmedial lines Hind wing nearly pure white.

Hab. Shan States. Exp. 18 millim Type in B M.

Genus POLYOCHA.

Polyocha, Zell Isis, 1848, p 876. Emmalocera, Rag Nouv Gen p 38 (1888) Lodiana, Rag Nouv Gen p 38

Type, P. sanguarmella, Zell, from Europe

Range Abyssima, Palæarctic and Oriental regions to Flores. Palpi long, the 2nd joint hollowed out to receive the brush-like maxillary palpi, from with a tuft of scales; antennæ with a large tuft of scales in a sinus at base of shaft; mid and hind tibiæ fringed with hair on outer side. Fore wing with the apex rounded, vein 3 from before angle of cell, 4, 5 from angle or stalked, 8, 9 stalked. Hind wing with vein 3 usually from angle; 4, 5 stalked; 6, 7 from upper angle.

- SECT I. Antennæ of male serrate Fore wing with yein 10 from cell.
- A (Emmalocera). Palps obliquely upturned, hind wing with vein 8 free
- 4307 Polyocha leucocincta, Wil. Cat xxvii, p 169
 Emmalocera lucidicostella, Rog Nouv Gen p 38, id Mon
 Phyc pl xxxv, fig 20, C & S no 4612
- d. Head and thorax rufous and pink, abdomen ochreous Fore wing with white costal fascia narrowing to apex, the costal pinkish, the area below it yellowish rufous, with a dark subcostal streak, the inner area pale. Hind wing whitish, the apical part of costa slightly tinged with fuscous

2 with the base of abdomen ochreous

Hab NW. Himalayas, Punjab, Assam, Borneo Eup. 28 millim

- 4308. Polyocha umbricostella, Rag Nouv Gen p 38, id. Mon Phyc pl xxxvi, fig 10, C & S no 4613
- 3 Differs from loucoconcia in the fore wing having the area below the costal fascia pinker, the veins and interspaces of outer area streaked with fuscous.

Hab N.W Himalayas, Flores Evp. 28 millim.

- B. (Polyocha). Palps porrect, hind wing with voin 7 anastomosing with 8
- 4309. Polyocha aurifusella, Wik Cat xxxv, p 1756, Rag. Mon Phyc pl xxxvi, fig 18, C & S no. 4615.

Golden yellow, the head and shoulders tinged with crimson, abdomen pale Fore wing with a crimson spot at base; a crimson and fuscous costal fascia from before base to apex, a crimson fascia on inner margin, three antemedial crimson and fuscous spots, one at end of cell, and a postmedial series bent inwards below costa, the calia pink Hind wing yellowish white

Hab NW Himalayas, Punjab, Bombay. Exp 26-32 millim.

4310. Polyocha umbrivittella, Rag Nouv Gen p 38, id. Mon Phyc pl. xxxv, fig 19, C & S no 4614.

Grey suffused with fuscous and pink. Fore wing with an ill-defined dark fascia below the cell, a discocellular spot; the veins with dark streaks. Hind wing pale yellowish fuscous.

Hab. Punjab. Exp. 25 milim.

4311. Polyocha cmerella, n. sp

2. Brownish grey. Fore wing with the base rather browner; a broad brownish medial band with waved line on its outer edge; a discocellular spot, a waved postmedial brownish line with diffused.

brown beyond it, a marginal series of specks Hind wing rather paler

Hab. Simla (Harford). Evp 32 millim Type in B M.

4312 Polyocha depressella, Swinh P Z S 1885, p 876, pl 57 fig 5, C & S no 4733 Polyocha variegatella, Rag Nouv Gen p 39, id Mon Phyc

pl xxxvi, fig 16, C & S no 4618

Q Head pale pink, thorax brown, abdomen ochreous Fore wing pink, with a white costal fascia slightly suffused with pink and narrowing to base and apex; the area below the costal fascia broadly suffused with brown; the veins of outer area streaked with brown. Hind wing white with a slight yellow tinge.

Hab. Dharmsála, Poona; Nilgiris; Pulo Laut Evp 22-36

millim.

- *4313 Polyocha detritella, Rag Nouv Gen p 39, id Mon Phyc pl xxxvi, fig 14, C & S no. 4617
- d. Yellowish white Fore wing with a subcostal brownish streak Hind wing white.

Hab. Dharmsála Exp 23 millim

- *4314. Polyocha carnatella, Rag Nouv Gen. p 39, id. Mon Phyr pl xxxv, fig 25, C & S no 4616
- Q. Yellowish pink Fore wing with the costa narrowly edged with white Hind wing yellowish white, with pinkish marginal line. Hab. Lahore. Exp. 24 millim
- SECT. II. Antennæ of male with uniseriate branches; fore wing with vein 4 stalked with 5, and 10 with 8, 9; hind wing with vein 3 stalked with 4, 5.
- 4315. Polyocha leucania, Feld Ress. Nov pl. 137, fig 13, C. & S

Polyocha vesculella, Rag Nouv Gen p 39, C & S no 4619

Head and thorax pink; abdomen ochreous Fore wing grey suffused with pink; the interspaces streaked with pink, the veins white defined by pink and usually also by fuscous. Hind wing pale fuscous.



Fig 42 -Polyocha leucania, & 1.

The Sikhim male has the branches of antennæ shorter than in the Southern form.

Hab Dharmsála, Sikhim, Nilgiris, Ceylon; Burma. Exp. 22-40 millim.

Subfamily PHYCITINÆ.

Proboscis well developed Fore wing with vein 1a separate from vein 1b; 7 absent Hind wing with the median nervure pectinated on upperside, vein 7 usually anastomosing with 8, fremulum simple in female as in male

Key to the Genera.

A Hind wing with two veins arising from median nervine	1. Ministris, p. 65
B Hind wing with three veins arising from	1. MIMBIA, P. 00
median nervure	
a. Fore wing with vein 9 absent a'. Fore wing with vein 4 absent, 3 and	
E from coll	2 EPHESTIA, p 66
b' Fore wing with veins 4, 5 stalked	3 Номовома , р 66
b. Fore wing with veins 8, 9 stalked	- -
a'. Hind wing with vein 2 from or from	[p 68.
close to angle of cell a ² Palpı upturned	4 HETEROGRAPHIS,
b ² . Palpi oblique or porrect, the 3rd	•
joint downcurved .	5 Ancylosis, p. 71.
b'. Hind wing with vein 2 from well before angle of cell	6 Euzophera, p 72.
O Hind wing with four veins arising from	o moscamen, p var
median nervure	
a Palpi with the 2nd and 3rd joints upturned.	
a' Hind wing with vein 5 stalked with 4. a' Hind wing with vein 3 approximated	
to or stalked with 4, 5	
a ³ . Fore wing with veins 3, 4, 5	
stalked .	7. Endolasia, p 74
b ³ . Fore wing with veins 4, 5 stalked, 8 from cell.	
a4. Fore wing with vein 10 stalked	
with 8, 9	8. Sandrabatis, p 75.
b. Fore wing with vein 10 from the cell	9. MICROTHEIX, p 76.
the cell c ⁸ Fore wing with veins 4, 5 from a	o. mionornary, p 10.
point and approximated for some	[p 76.
distance	O NEPHOPTREYN,
separated at origin	1 Remonanta n. 85
b2 Hind wing with vein 3 diverging	4212020023, pr 00
from angle of cell.	
as Fore wing with youns 4, 5 stalked.	[p 87.
a. Hind wing with the cell about one third length of wing 1	2. Hypargyria.
6. Hind wing with the cell about	
half the length of wing 1	S. Myrlois, p 88.
b ³ Fore wing with veins 4, 5 approximated for a short distance	
at Hind wing with the cell about	,
half the length of wing 1	4. Hypsipyla, p. 89.

b4 Hind wing with the cell about one-third length of wing		Рнусіта, р 90.
c ³ . Fore wing with veins 4, 5 well separated towards origin b' Hind wing with vein 5 from angle of	16.	Внорорнал, р 98.
cell a ² Hind wing with the cell about one- fifth length of wing		[p 101 Spatulipalpia,
 b² Hind wing with the cell about half the length of wing a³ Fore wing with a ridge of raised scales before the antemedial line 		Crnonverses n 103
bifore wing with no ridge of scales before the antemedial line α Fore wing with veins 4, 5	10	Oraceastra, p 100
approximated for a short dis- tance or stalked, hind wing with veins 4, 5 well separated b4 Fore wing with veins 4, 5 well	19	[p 104. Cryptoblabes,
separated, hind wing with veins 4, 5 approximated for a short distance Palpi with the 3rd joint porrect Palpi porrect	21	THIALLELA, p 106 TEPHRIS, p 106 ETIELLA, p 108

Genus MIMISTIS, nov.

Type, M actiosoides, Hmpsn.

Range. Ceylon.

Palpi upturned, long, and reaching well above vertex of head; maxillary palpi filiform, antenne ciliated. Fore wing with vein 2 absent, 3 from angle of cell, 4, 5 on a long stalk, 8, 9, 10 stalked. Hind wing with the cell quite open, veins 3 and 4 stalked, 2 and 5 absent, 6, 7 long, 7 anastomosing with 8

4316. Mimistis actiosoides, n sp.

Head and thorax fuscous black; palpi banded with grey; legs banded grey and black, abdomen fuscous and grey. Fore wing



Fig 43 -Mimistis actiosoides, Q. +

black-brown, with a pink irrorated white triangular patch on costa before—idle extending down to vein 1—a similar large postmedial patch embracing the two prominent discocellular black spots and not extending below median nervure, a minutely

dentate submarginal dark line defined by grey, a marginal series of black specks, and grey patch below apex. Hind wing pale tinged with fuscous

Hab Putlam, Ceylon (Pole). Evp. 16 millim. Type in B M. vol iv.

Genus EPHESTIA.

Ephestia, Guen Eu: Microlep Ind Meth p 81 (1845) Cadra, Wil. Cat xxx, p 961 (1864)

Type, E elutella, Hubn, from Europe.

Range Universally distributed

Palpi upturned and reaching just above vertex of head, the 3rd joint well developed, maxillary palpi filiform; antenns of male somewhat thickened. Fore wing long and narrow, vein 4 absent, 3 and 5 from angle, 9 absent, 10 free, male with a fold at base of costa on underside containing a fringe of long hair. Hind wing with vein 2 from well before angle of cell; 3, 4 from angle; the discocellulars oblique, 6, 7 stalked, 7 anastomosing strongly with 8

SECT. I Antennæ of male with the shaft not excised towards base.

4317 Ephestia cautella, Wik Cat. xxvii, p 73, C & S no 4586 Cadia defectella, Wik Cat xxx, p 962, C & S no 4646



Fig 44—Ephestra cautella, 3

Fuscous grey-brown Fore wing with indistinct erect antemedial brown band, traces of a minutely dentate submarginal line slightly bent outwards at vein 5. Hind wing semihyaline whitish, the veins and margins tinged with fuscous

Hab Aden; Bhután, Ceylon; Sumbawa Exp, o 14-16, 9 18 millim.

SECT II Antennæ of male with the shaft excised towards base.

4318 Ephestia rubrimediella, n sp

Head and thorax brown irrorated with grey; abdomen fuscous. Fore wing brown thickly irrorated with grey, a large medial red-brown patch or diffused band; two discocellular specks, an ill-defined irregularly dentate postmedial brown line with traces of another line beyond it, an indistinct marginal series of brown specks. Hind wing pale semihyaline brown, with brown marginal line; the cilia grey.

Hab Khası and Naga Hills (Doherty) Eap. 26 millim. Type

in coll Elwes

Genus HOMŒOSOMA.

Homeosoma, Curt Ent Mag 1, p 190 (1833)

Type, H sinuella, Fabr, from Europe

Range. Universally distributed

Palpi upturned and reaching vertex of head, the 3rd joint well-developed and acuminate, maxillary palpi filiform, antennæ of

male somewhat thickened Fore wing long and narrow, vein 3 from angle of cell, 4, 5 stalked, 9 absent; 10 free Hind wing with the cell short, vein 2 from well before angle. 4 absent, 3 and 5 from angle, the discocellulars erect, 6, 7 shortly stalked, 7 anastomosing strongly with 8

4319 Homœosoma ephestidiella, n sp

Fore wing with indistinct dark antemedial line strongly angled on median nervure, a dark discocellular mark, a pale submarginal line slightly bent outwards at vein 5, two dark specks near middle of outer margin Hind wing semihyaline white, the veins and margins slightly tinged with brown

Hab Nilgiris (Hampson), Sumbawa (Doherty) Exp 18 millim.

Type in B M

4320. Homœosoma albovittella, Rag Nour Gen p 35, id Mon Phyc (Rom Mém vin) pl xxxiv, fig 2, C & S no 4606



d Head and thorax rufous, antennæ with the shaft whitish Fore wing rufous, with a broad white costal fascia, slightly irrorated with rufous and widening to apex Hind wing pale brownish ochreous

Hab Allahabad Eip. 20

mıllım

4321 Homœosoma griseipennella, n sp

Q. Head and thorax grey, the vertex of head white; abdomen whitish Fore wing grey and white, a dark spot at base of costa, a fuscous antemedial band in vardly defined by white and angled on median nervure, traces of two dark discocellular specks; an oblique sinuous fuscous postmedial band outwardly defined by Hind wing whitish, with slight marginal fuscous line.

Hab Murree (Harford) Erp 32 millim Type in B M.

- 4322 Homeosoma punctistrigella, Rag Nouv Gen p 33, id Mon Phyc pl xxxiii, fig 3, C & S no 4610.
- d. Pale yellow Fore wing narrow, the apex acute, the antemedial line represented by three obliquely placed dark specks on the veins, two prominent discocellular specks, an oblique dark postmedial line, the veins of outer area irrorated with fuscous.

Hab Punjab Exp 20 millim

4323 Homeosoma bipunctella, n sp

Head and thorax grey-brown; the palpi dark, abdomen Fore wing pale reddish brown, the costal half suffused with white, narrowing to aper, traces of a curved ante-

ţ

medial line, two black discocellular specks, two indistinct oblique submarginal lines, a marginal series of black specks. Hind wing white, the apical area tinged with brown, a marginal brown line. Hab. Ceylon (Green) Exp. 18 millim Type in B. M.

- 4324. Homœosoma fuscifusella, n. sp
- Q Brown. Fore wing thickly irrorated with dark brown, a darker streak below median nervure, two brown discocellular specks and a marginal series Hind wing pale brownish, the cilia white.

 Hab Ceylon (Green) Exp. 24 millim Type in B M
- 4325. Hommosoma goliathella, Rag Nouv Gen p 35, ed Mon Phyc. pl xxxii, fig 22, C & S no 4609
- Q. Olive-brown irrorated with dark brown. Fore wing with the costal area pale, some dark suffusion below base of median nervure, an ill-defined antemedial dark line strongly angled below the cell, two black discocellular spots, the lower large, an indistinct postmedial dark line angled beyond the cell, then oblique, a marginal series of black specks. Hind wing paler, with marginal brown line

Hab. Calcutta Exp 40 millim.

Genus HETEROGRAPHIS.

Heterographis, Rag Ent Mo Mag xxii, p 31 (1885) Anonæpestis, Rag Indian Museum Notes, iii, p 106 (1894).

Type, H. oblitella, Zell., from Europe

Kange Nearctic and Palæarctic regions, India, Ceylon.

Palpi upturned, the 3rd joint well-developed and acuminate. Forewing long and narrow, veins 2, 3 from close to angle of cell, 8, 9 stalked Hind wing with vein 2 from angle of cell, 3 and 5 stalked, 6, 7 from upper angle, 7 anastomosing with 8.

- SECT I Maxillary palpi triangularly scaled and flattened against the trons, antennæ of male somewhat thickened.
 - A Fore wing with veins 4, 5 from cell, 10 present
- 4326 Heterographis singhalella, Ray Ann Soc Ent F: 1888, p 283, and Mon Phys pl axa, ing 24, C & S no 4603
- d. Head and thorax ochreous tanged with rufous, abdomen pale. Fore wing ochreous, tanged with rufous and arrorated with black, the basal area suffused with red, a subbasal black spot below costa, an antemedial slightly oblique pale line with black specks on its edges, and slightly dentate on vein 1, a white discocellular spot and black speck at lower angle of cell, a pale submarginal line slightly bent outwards at vein 5, a black mark at apex and marginal series of black specks. Hind wing semihyaline white, the marginal area brownish.

Hab Ceylon. Exp 14-16 millim

4327. Heterographis pygmæella, n sp

Head white, thorax white and rufous, abdomen grey Fore wing pale brown, with a broad white costal fascia, narrowing at middle of cell, where there is a black spot, a large pink patch on inner area before middle, followed by a V-shaped white mark on vein 1; a sinuous white submarginal line with diffused fuscous inside it. Hind wing semihyaline white, the apical area, a marginal line, and a line through the cilia brownish

Hab Ceylon (Pole). Exp 12 millim Type in B M.

4328 Heterographis mysorella, Rag Nouv Gen p 29, id Mon. Phyc pl xxvm, fig 22, C & S no 4602

Brownish ochreous Fore wing with a white costal fascia expanding at middle and not reaching the apex, the antemedial line represented by a spot on vein 1, the postmedial line fine and very indistinct, two discocellular dark spots and a marginal series. Hind wing yellowish grey.

Hab S India Exp 15 millim

4329 Heterographis verrucicola, n sp

Dark red-brown suffused with fuscous Fore wing with white costal fascia from near base to near apex; a very indistinct

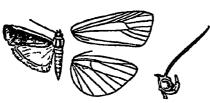


Fig 46 —Heterographis verrucicola, J. 3

irregular antemedial dark line oblique towards costa; a black speck at upper angle of cell; an indistinct minutely dentate submarginal dark line, a marginal series of black specks. Hind wing hyaline white, the veins, a marginal line, and a line through the cilia brown.

Larva Uniform dark purplish brown, a few fine colourless bristles scattered over the body, a well-marked lateral fold, each segment with one or more deep transverse furrows. Inhabits wartlike excrescences in the stem and branches of Trema orientalis, forming galleries in the diseased wood, and pupating in slight whitish cocoons. It is uncertain if the larvæ are the primary cause of the excrescences, but the galleries, after being deserted by the moths, usually contain colonies of the mealy bug Dactylopius adonidum, and these in their turn attract a species of ant which builds a covering over them, the foundation of large nests which gradually increase in size and obstruct the growth of the tree (Green)

Hab Nága Hills (Doherty), Pundaloya, Ceylon (Green) Exp. 14-18 millim Type in B M

4330 Heterographis rubripictella, n sp

A Head white, thorax brownish ochreous, abdomen which with an ochreous tinge on dorsum. Fore wing brownish ochreo-

with a white costal fascia widening on disk and not reaching the apex; diffused pink fasciæ along median nervure and vein 1, an outwardly oblique antemedial white line, a discocellular spot, and inwardly oblique postmedial line; the margin pink, cilia white. Hind wing pale tanged with fuscous

Hab. Meean Meer, Punjab (Harford). Exp 14 millim Type

ın B. M.

- 4331. Heterographis suboblitella, Rag Now Gen p 29, id Mon. Phys. pl xxx, fig 11, C & S no. 4604
- J. Grey Fore wing suffused with ochreous below cell and on outer area, ante- and postmedial whitish lines bordered by black, at middle, the former interrupted and preceded by a broad ochreous band becoming blackish on inner area, the latter very sinuous and excurved at middle, a dark spot at lower angle of cell. Hind wing semilyaline yellowish grey

Hab S India. Exp. 17 millim.

- B. For e wing with veins 4, 5 stalked.
 - a Fore wing with vein 10 present.

4332. Heterographis micralis, n sp

J. Head and collar black, thorax, abdomen, and fore wing brownish grey irrorated with black, the last with the costa black, two black discocellular specks, and one below angle of cell on vein 1; the outer area black, narrowing to apex and crossed by a pale submarginal line. Hind wing pale

Hab Hambantota, Ceylon (Pole) Ewp. 10 millim. Type

in B M.

b (Anonepestis) Fore wing with vein 10 absent.

4333 Heterographis resticula, n sp

Fuscous black, abdomen paler fuscous Fore wing with the basal area blacker, bounded by an oblique ochreous antemedial hine, slightly angled on median nervure; a sinuous ochreous submarginal line bent outwards at vein 5, a slight pale marginal line. Hind wing pale fuscous

Hab Calcutta Ceylon Exp. 12 millim. Type in B M

4334 Heterographis bengalella, Rag. Indian Museum Notes, m, p 107, Mon Phyc (Rom Mém vin) pl xhi, fig 20

Head and collar olive-green; thorax purplish, abdomen ochreous, the basal segment whitish, the 2nd fuscous Fore wing with the costal half olive-green and white, the inner half vinous red, an indistinct sinuous white medial line and dentate white submarginal line, a marginal series of dark specks Hind wing semilyaline; the veins, a marginal line, and a line through the cilia brown

The larva bores in the fruit of the Custard Apple.

Hab. Bhutin, Calcutta Eap 24 millim.

SECT II. Palpi of male with the 2nd joint hollowed out to contain the brush-like maxillary palpi, from with a rounded prominence, antennæ ciliated

4335. Heterographis unipunctella, Hmpsn P.Z S 1896, p 270

Head and thorax grey and fuscous; abdomen with a rufous tinge. Fore wing grey, thickly irrorated with fuscous; an indistinct dark antemedial line, angled inwards in cell, then becoming white with a fulvous patch on its inner side, becoming fuscous at inner margin, a black speck at lower angle of cell; a sinuous dark submarginal line outwardly defined by white, beyond which is a fuscous patch at apex and a fulvous patch from vein 6 to inner margin. Hind wing semilyaline white; the veins, marginal area, and a line through the cilia brown

Hab Aden Meean Meer, Punjab Exp. 18 millim.

Genus ANCYLOSIS.

Ancylosis, Zell Isis, 1839, p 178

Type, A cannamomella, Dup, from Europe

Range Palæarctic region, S Africa, India; Ceylon

Palpi obliquely upturned and reaching just above vertex of head, the 3rd joint porrect, maxillary palpi filiform and minute; antennæ of male somewhat thickened. Fore wing long and narrow, veins 2, 3 from near angle of cell; 4, 5 from angle, 8, 9 stalked: 10 free. Hind wing with vein 2 from angle of cell, 3 and 5 stalked, 6, 7 stalked, 7 anastomosing with 8.

- 4336 Ancylosis ilella, Swinh P. Z. S 1884, p 529, pl 48, fig 6; C & S no 4587
- Q Ochreous, thickly irrorated with fuscous brown Fore wing with indistinct oblique antemedial brown line; a dark spot at lower angle of cell, an indistinct oblique postmedial line bent outwards at vein 5 Hind wing rather paler, cilia of both wings grey.

Hab. Karáchi and Hyderabad, Sind Exp 16-20 millim

- 4337 Ancylosis lapsalis, Will Cat xix, p 829, Hmpsn Ill Het ix, pl 172, fig 21, C & S no 4537
- Q. Ochreous brown Fore wing with diffused fuscous marginal band. Hind wing paler.

Hab Ceylon. Evp 18 millim

- 4338 Ancylosis carnea, Wan P Z S 1888, p 336, Rag. Mon Phyc. pl xhr, fig 9, C & S no 4560.
- P Head and collar grey, thorax flesh-coloured, abdomen ochreous Fore wing flesh-coloured, a white costal fascia irrorated with pink and a few black scales, and terminating before apex, traces of a white antemedial line, with black speck on it, at vein 1; a black speck at lower angle of cell, a sinuous white submarginal

line, a white marginal band irrorated with black. Hind wing white, with pale brown marginal line and line through the cilia.

Hab. Campbellpur, Punjab Exp 18 millim.

4339 Ancylosis? lucida, Warr. P Z S 1888, p 336, C. & S. no. 4572

Q. (Head wanting,) thorax and fore wing otherous, the last with white costal fascia, an oblique pink band from the base of subcostal nervure to inner margin, an oblique medial band not reaching the costa, a nearly straight and erect postmedial band and a marginal band. Abdomen and hind wing whitish

Hab Campbellpur, Punjab. Erp. 18 millim.

4340 Ancylosis trilineatella, n sp.

Red-brown suffused with grey Fore wing irrorated with black; a broad diffused grey costal fascia thickly irrorated with black, two oblique fuscous antemedial lines defined by white on inner side; a dark speck at lower angle of cell, an incurved fuscous submarginal line defined by white on outer side, the margin suffused with grey. Hind wing pale semihyaline brown, the cilia grey, with a brown line through them

Hab Meean Meer, Punjab (Harford). Eap. 16 millim Type

m B. M.

4341. Ancylosis nivercostella, n sp

Dull red-brown, abdomen pale.



Fig 47 —Ancylosis nivercostella, &

Hab. Bombay, Ceylon (Green)
B M

Fore wing dull red-brown; a broad pure white costal fascia irrorated with a few pink scales, below the costal fascia is a leaden-coloured fascia along median nervure sending three spurs down to vein 1, a bright red spot at outer angle and marginal series of dark specks. Hind wing yellowish white

 E_{ap} 18 millim Type in

Genus EUZOPHERA.

Stenoptycha, Von Hein Schmett Deutsch 1, 2, p 190 (1863), præocc Meha, Von Hein t c p 209, præocc Euzophera, Zell Trans Ent Soc (3) v, p 456 (1867)

Type, E bunclla, Zell, from Europe

Range Neotropical, Palearctic, and Ethiopian regions, India, Ceylon.

Palpi upturned and reaching vertex of head, the 2nd joint fringed with scales at extremity, the 3rd joint well developed and acuminate, antenna of male somewhat thickened Fore wing long and

narrow; the apex rounded, vein 3 from before angle of cell; 4, 5 usually stalked, 8, 9 stalked, 10 usually free Hind wing with vein 2 from before angle of cell, which is long, 4 absent, 6, 7 from upper angle, 7 anastomosing strongly with 8.

SECT I. Maxillary palpi triangularly scaled and flattened against the frons, mid and hind tibiæ fringed with hair on outer side; hind wing with veins 3, 5 stalked.

4342. Euzophera perticella, Rag Nouv Gen p 32, id Mon Phyc. pl xxxi, fig 1, C & S no 4605

Head and thorax pale rufous and grey, abdomen pale Fore wing pale rufous, the costal area to beyond middle and the apical



Fig 48—Euzophera perticella, 3 }

area suffused with grey, a black line from middle of costa, very strongly dentate, being retracted along subcostal and median nervures almost to base of wing, bent outwards in and below cell to beyond middle of wing, and termi-

nating on inner margin before the middle, a slight pale discocellular mark, a postmedial minutely dentate line very slightly bent outwards at vein 5, defined on outer side by ochreous, beyond this fuscous suffusion and streaks on the veins and in interspaces, a marginal series of black specks. Hind wing whitish, the marginal area tinged with fuscous in female.

Hab Calcutta, Nilgiris, Ceylon. Eip, & 26, ♀ 32 millim.

4343. Euzophera punicæella, Moore, Indian Museum Notes, 11, p 28, Rag Mon Phyc pl xli, fig 25

Q Fuscous suffused with black Fore wing with diffused fuscous-black antemedial band, with whitish band on its inner edge from cell to inner margin, a postmedial line excurved from costa to yein 2 Hind wing uniform fuscous

The larva bores in the fruit of the Pomegranate

Hab Baluchistan Eap 20 millim.

SECT II Maxillary palpi filiform, tibiæ smoothly scaled, hind wing with veins 3 and 5 from angle of cell.

4344 Euzopheia plumbeifasciella, n sp

Q Head and thorax brown, abdomen pale brown Fore wing deep brown, with antemedial, medial, postmedial, submarginal, and marginal bands of diffused leaden-coloured scales, the antemedial and postmedial dilated towards costa, the latter and the marginal bands broadest Hind wing pale brown

Hab Calcutta (Atkinson). Exp. 16 millim Type in B M.

SECT III Fore wing with veins 4, 5 from cell, 10 stalked with 8, 9, male with a costal fold enclosing a tuft of long hair; hind wing with veins 4, 5 shortly stalked

4345 Euzophera niveicostella, n sp

Dark red-brown property with brown from near base to near aper, widest at Fore wing with a white costal fascia slightly middle, an antemedial somewhat irregular line, oblique and usually reduced to two spots towards costs, two discocellular dark specks, a minutely dentate submarginal pale line, a marginal series of dark specks Hind wing fuscous brown, rarely whitish, the cilia grey, with a brown line through them

Hab Ceylon (Green) Exp, 5 18, 220 millim

SECT IV Fore wing with veins 2, 3 stalked, 4, 5 from cell, 10 Type in B M. absent Hind wing with vein 7 becoming coincident with 8, 4346. Euzophera micans, n sp

4 Head and thorax ochreous brown, palpi dark at base, abdomen suffused with fuscous Fore wing reddish brown, irrorated with bright scales, an indistinct nearly straight pale submarginal line Hind wing pale silky brown, the veins, a marginal line, and a line through the cilm darker Hab Hambantota, Ceylon (Pole)

m B M Erp 14 millim Туре

Genus ENDOLASIA, nov

Type, E melanoleuca, Hmpsn Range Sind

Palpi upturned and reaching above vertex of head, the 2nd joint in male greatly dilated and hollowed out to receive the brush-like maxillary palpi, from smooth, antenna of male with a sinus at base of shaft with a lidge of scales in it Fore wing with the costs arched at middle, vein 2 from near angle of cell, 3, 4, 5 stalked, 10 free Hind wing with the cell nearly half the length of wing, vein 2 from close to angle of cell, 3, 4, 5 stalked; 6, 7 stalked, 7 approximated to 8 4347 Endolasia melanoleuca, n sp



Endolasia melanoleuca, d

A Maxillary palpi ochreous, head and thorax black, abdomen fuscous Fore wing black, with a broad white nearly erect antemedial band, its outer edge tinged with brown, a small ochreous tri-Hab Mitras Canal, Sind. Erp 18 millim Type in B M angular postmedial spot on costa Hind wing pure white.

Genus SANDRABATIS.

Sandrabatis, Rag. Mon Phyc (Rom Mém vii) p 203 (1894)

Type, S. crassiella, Rag

Range N E. and S. India, Ceylon

Palpi upturned, in female with the 2nd joint reaching above vertex of head, the 3rd well developed and acuminate, the maxillary palpi filiform, in male the 2nd joint of palpi is very long, hollowed out, and containing the maxillary palpi, which end in a brush of very long hair, the 3rd joint short, from with a tuft of long hair; antennæ of male with a thick ridge of scales on base of shaft; thorax with ridges of large scales along the coxæ; mid tibiæ dilated with a fold containing a tuft of long hair, hind tibiæ fringed on outer side with very long coarse hair. Fore wing of male with a large patch of thick raised scales on basal inner area and tufts of raised scales on the antemedial line below costa; the costa produced to a rounded lobe at middle, of which the female also has slight traces, vein 3 from angle of cell, 4, 5 stalked, 8, 9, 10 stalked and curved. Hind wing of male with the costa arched, the cell very short, vein 2 from angle; 3, 4, 5 stalked; 6, 7 stalked, 7 anastomosing with 8.

4348 Sandrabatis crassiella, Rag Mon Phyc p 204, pl xviii, fig 7.

3. Head, thorax, and abdomen reddish brown and fuscous; antennæ with the ridge of scales, the frontal tuft, and a tuft behind the antennæ black. Fore wing with the basal patch of thick scales dark grey, the tufts on antemedial line black; the rest of wing reddish brown, variegated with red and fuscous, a minutely dentate ochreous antemedial line bent outwards from vein 3 to inner margin, with a series of black specks on its inner edge and short black streaks on the veins beyond it; a marginal series of black specks. Hind wing fuscous brown, the cilia ochreous

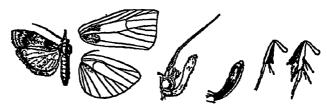


Fig 50 - Sandrabatis crassiella, o

Q with the fore wing variegated with pale and dark red-brown shades or nearly uniform; without the dark basal patch; a black streak in base of cell, the antemedial line represented by an oblique line from costa and a speck on median nervure

Hab Bhután, Nágas; Manipur, Nilgiris; Ceylon. Esp. 24

millim.

Genus MICROTHRIX.

Microthrix, Rag Nouv Gen p 25 (1888)

Type, M inconspicuella, Rag

Range S Africa, Punjab, Burma

Palpi upturned, reaching well above vertex of head, the 2nd joint in male hollowed out and enclosing the maxillary palpi, which end in a tuft of hair, from smooth, antennæ of male thickened and flattened, with a sinus at base with a ridge of scales in it, this rather thickly scaled Fore wing long and narrow, veins 2 and 3 from close to angle of cell; 4, 5 stalked, 10, 11 free Hind wing with vein 2 from near angle of cell, 3, 4, 5 stalked, 6, 7 from upper angle, 7 anastomosing with 8

4349. Microthrix inconspicuella, Rag Nouv Gen p 17, id Mon Phyc p 324, pl xiii, fig 17, C & S no 4580 Microthrix fuscidorsella, Rag Nouv Gen p 25

d Maxillary palpi white, antennæ black, head, thorax, and abdomen pale brown tinged with fuscous Fore wing pale brown,



Fig 51 -Microthrix inconspicuella, of

with an olive tinge and irrorated with fuscous, a brown and fuscous antemedial patch on inner area surrounded with grey, an indistinct medial line angled outwards below costa and inwards on vein 1, two dark discocellular specks, traces of an oblique

submarginal line with grey outer edge. Hind wing pale fuscous; the cilia pale, with a dark line through them

Hab Natal, Punjab, Burma. Esp 18 millim

Genus NEPHOPTERYX.

Nephoptery v, Hubn Verz p 370 (1818 °)
Salebria, Zell Isis, 1846, p 779
Ceutholopha, Zell Stett ent Zeit 1867, p 375
Thylacoptila, Meyr Ent Mo Mag 1885, p 105
Bussa, Rag Nour Gen p 24 (1888)
Oligochroa, Rag Nour Gen p 20
Palibothra, Rag Bull Soc Ent Fr 1889, p ccxvin
Melathrix, Rag Mon Phyc p 435 (1894)
Pristarthria, Rag Mon Phyc p 326 (1894).

Type, N rhenella, Zinck, from Europe Range Universally distributed

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd short and acuminate, from roughly scaled, antennæ of male typically with a sinus at base of shaft containing a ridge of scales; tibiæ thickly scaled, the outer spurs about two-thirds length of inner. Fore wing with the apex somewhat rounded, vein 3 from before angle of cell, 4,5 approximated for some distance, 10 free.

Hind wing with the cell short; vein 2 from near the angle, 3 approximated to or stalked with 4, 5, 6, 7 stalked, 7 anastomosing with 8

- SECT I (Nephopter yx) Palpi of male with the 2nd joint not excised to receive the maxillary palpi, antennæ not thickened.
 - A Antenna of male with no sinus at base of shaft
 - B. Hind wing of male with no streak of large black scales on vein 1 b.
- 4350 Nephopteryx 1 hyparella, Ray Nouv Gen p 15, 1d Mon Phyc p 268, pl x, hg 15, C & S no 4582 Acrobasis nigrescens, Warr P Z S 1888, p 336, C & S no 4564
- o. Head, thorax, and abdomen fuscous, irrorated with grey Fore wing fuscous irrorated with grey, an oblique white antemedial band diffused outwards below costa and with a white spot beyond it above inner margin, two discocellular black specks, a submarginal dark-outlined grey line bent outwards at vein 5 Hind wing fuscous
- Q Often much greyer, fore wing with the costal part of antemedial band more diffused and with a dark patch beyond it; the discocellular spot and a series of marginal specks prominent.

Hab Campbellpur, Simla; Murree Exp 22 millim.

4351 Nephopteryx basisignella, n sp.

Q. Grey Fore wing with semicifular brown spot on base of inner margin, an oblique white antemedial band with sinuous lines just inside its edges, two almost conjoined discocellular black specks; a fuscous-edged whitish submarginal line bent outwards at vein 5 and crossed by an oblique diffused fuscous shade from apex, a series of marginal black specks. Hind wing fuscous, the cilia white

Hab Ceylon (Pole). Evp 18 millim Type in B M

- 4352. Nephopteryx eugraphella, Rag Nouv Gen p 15, id Mon Phyc p 281, pl 1x, ng 14, C & S no 4578.
- Q Grey Fore wing slightly suffused with brown and irrorated with black, an oblique antemedial band edged by black lines, the inner with a ridge of laised scales, the band traversed by a fuscous line, two black discocellular specks, the postmedial line inwardly oblique from costa to vein 5, then bent outwards to vein 2, a brown line beyond it, a marginal black line and some specks on the cilia Hind wing semilyaline white, the apical area, a marginal line, and line through the cilia fuscous

The larva teeds on cured Tobacco and the "Bukool' tree, Mimusops elengi

Hab Punjab, Calcutta Exp 22 millim

4353. Nephopteryx canescentella, n sp

Q Head, thorax, and abdomen grey irrorated with fuscous. Fore wing grey, uniformly irrorated with blown and fuscous, traces of a dark antemedial line and patch on inner area, an indistinct grey submarginal line angled inwards below costa, the cilia fuscous, with a grey line through them. Hind wing semi-hyaline white, the margin and a line through the cilia fuscous

Hah Thayetmyo, Burms (Watson). Eap 16 millim Type

ın B M

4354 Nephopteryx ochribasalıs, n sp

Q. Head, thorax, and abdomen pale ochreous, abdomen tanged with brown, paired dorsal purplish spots on the first two segments. Fore wing with the basal area pale ochreous, a slightly curved antemedial black line, with an indistinct purplish line inside it and a fuscous patch on inner margin, the outer area fuscous brown irrorated with grey, pale ochreous, and a few purple scales, a submarginal black line defined by grey and excurved between veins 5 and 2, a marginal series of black specks. Hind wing pale brown; the cilia grey, with a brown line through them

Hab Bhután (Dudgeon). Esp 26 millim Type in B M

4355. Nephopteryx semurrorella, n sp

2. Dark red-brown; head ochreous, thorax suffused with grey, abdomen fuscous Fore wing with the costal half thickly suffused with grey, medial white specks on median nervure and vein 1, an industrict submarginal dark line excurved and minutely dentate between veins 6 and 2, a marginal series of black specks Hind wing pale brown, darker at outer margin, a dark line through the cilia

Hab Bhután (Dudgeon), Nágas (Doherty) Exp 24 millim Type in B M

4356 Nephopteryx nocturnella, n sp

Q Head pale brown, collar with a purplish tinge, thorax dark fuscous, abdomen fuscous brown. Fore wing brown, almost entirely suffused with purplish fuscous, leaving a streak below median nervure and the outer part of inner area browner, a medial black line angled inwards on vein 1, a submarginal black line excurved between veins 5 and 2, a marginal black line. Hind wing brownish fuscous, with a dark line through the ciha. Fore wing with veins 4, 5 closely approximated for a long distance hind wing with vein 3 very closely approximated to 4, 5 for half its length.

Hab Bhután (Dudgeon) Exp 26 millim. Type in B. M

4357 Nephopteryx divisella, Dup Lep Fi Suppl iv, p 126, pl 60, fig 12, Rag Mon Phyc p 295 Pempelia euphorbiella, Zell Isis, 1846, p 757 Nephopteryx albiricella, Heri -Schaffer, Eur Schmett iv, p 73

Head red, palpi banded with white; thorax and abdomen pale brown, the tormer tinged with purple Fore wing pale brown; the costal half pure white, tapering to apex, irrorated with a few purplish scales and with a fuscous postmedial streak on the costa; an indistinct submarginal line Hind wing iridescent hyaline, the margin pale brown

Larva brown, with a chocolate dorsal band; paired fine black subdorsal lines and whitish slightly waved stigmatic line; the stigmata yellow, with white points and ringed with black, slight setiferous yellow warts, head black, the mouth yellow. Feeds in a colony on Euphorbia

Hab Europe, Gambia; Natal; Aden; Karáchi; Ceylon

22-24 millim

- b (Ceutholopha) Hind wing of male with a streak of large black scales at base of vern 1 b.
- 4358 Nephopteryx isidis, Zell Stettin ent Zeit 1867, p 375, Stainton, Trans Ent Soc 1867, pl 24, fig 6, Rag Mon Phyc p 252
- Grey-brown. Fore wing irrorated with rufous and white, or prorated with black in median interspace and suffused with rufous on outer area; a pale medial line with a reddish band on its inner edge and angled inwards on vein 1, the band expanding on inner area and with a black spot below the cell; a nearly straight pale submarginal line defined by blackish on inner side and rufous on outer, a marginal series of black specks and an apical spot Hind wing semihyaline white, with prominent streak of black Underside of fore scales on inner area, the margin brownish wing with subbasal patch of black scales below the cell

Hab Egypt; Karáchi Evp 20 millim

- B. Antennæ of male with the base of shaft strongly sinuous but without tuft.
- 4359 Nephopteryx bicolorella, Leech, Entom 1889, p 108, pl v fig 5, Rag Mon Phyc p 275, pl xlm fig 14

Head and thorax pale chestnut; the patagra pink, abdomen ochreous suffused with fuscous, the anal tuft pinkish Fore wing long and narrow, the apex rectangular: the basal half pale chestnut, red fasciæ on median nervure and vein 1 with a fold between them and an antemedial tuft of raised scales on vein 1; a pale pink antemedial line very oblique from costa to lower angle of cell, medial tufts of raised red scales on the discocellulars, median nervure, and vein 1, the outer area dark olive-fuscous; a submarginal line bent outwards and minutely dentate between veins 5 and 2, and with a series of pink specks on it from vein 5 to inner margin, developing into a spot above the margin, a marginal series of black specks, a brown line at base of cilia, which are pink-tipped

Hab Japan, Dalhousie Exp. 28-32 millim

- SECT II (Palsbothra) Palpi of male with the 2nd joint excised to receive the maxillary palpi, which are minute, the antennæ thickened after the sinus and tuft
- 4360 Nephopteryx fuscogrisella, Rag Bull Soc Ent Fr 1889, p ccaix, id. Mon Phyc p 310, pl xiv, fig 12
- Q. Pale grey-brown, slightly irrorated with black. Fore wing with traces of a sinuous antemedial line bent inwards to costa and outwards to inner margin, a dark speck at lower angle of cell, an indistinct submarginal line bent outwards between veins 5 and 2, a marginal series of dark specks. Hind wing whitish tinged with fuscous.

Hab E Africa, Karáchi, New Guinea Eup. 18-22 millim.

- 4361. Nephopteryx swinhoella, Rag Mon Phyc p 311, pl xiv, fig 10.
- 2. Head and thorax pale, thickly irrorated with rufous, abdomen ochreous. Fore wing pale, thickly irrorated with rufous, an indistinct obliquely curved antemedial pale line, outwardly edged by purplish; two dark discocellular specks, an indistinct purplish submarginal line slightly bent outwards between veins 5 and 2. Hind wing semihyaline white; the costal area and margin tinged with fuscous

Hab Rangoon Exp 16 millim

- *4362 Nephopteryx nebulosella, Rag Mon Phyc p 311, pl. xiv, fig 11
- d Head and thorax reddish brown, abdomen ochreous suffused with fuscous Fore wing elongate, brownish ochreous, entirely suffused with fuscous except the apical area, an antemedial pale erect line defined by fuscous at middle and angled inwards on vein 1, two obliquely placed indistinct large discocellular spots, a pale postmedial line bent outwards at vein 5, then oblique Hind wing semihyaline grey-brown

Hab Rangoon Erp 18 millim

- SECT III Palpi of male with the 2nd joint dilated and hollowed out to receive the brush-like maxillary palpi
- A (Thylocoptila) Antennæ of male with a large tuft of scales at extremity of basal joint, mid tibue fringed with long han, hind tibue with tufts of long hair from base and at extremity, hind wing with large corneous ridges above and below on vein 1 c and inner margin, enclosing deep furrows and with a small tuft of scales below from base

- 4363. Nephopteryx paurosema, Meyr Ent Mo. Mag. xx11, 1885, p 106, Raq Mon Phyc p 321
 Bussa maculella, Rag Nouv Gen. p 24, Mon Phyc p. 322, pl x111, fig 21
- d. Maxillary palpi ochreous, head, thorax, and abdomen grey. Fore wing grey irrorated with fuscous, the basal two-thirds of costa whitish, a large blackish antemedial oval patch not reaching



Fig 52 -Nephopteryx paurosema, of

costa and becoming brown near inner margin, two minute dark discocellular specks, an indistinct postmedial white line bent outwards and minutely dentate between veins 5 and 2, then angled inwards, a marginal series of black specks. Hind wing iridescent hyaline white, the apex tinged with brown; the ridges on inner area ochreous

Hab. Cape Verd Islands; W. Africa; Aden; Assam; Ceylon. Exp. 20-24 millim.

- B. (Melathrix) Antennæ of male with the base of shaft thickened by a ridge of scales, but without sinus, the shaft strongly ciliated.
- 4364. Nephopteryx prætextella, Christ Hor Soc Ent Ross. xii, p 279, pl viii, fig 51, Rag. Mon Phyc p 486, pl xvii, fig 15.

Ochreous slightly irrorated with fuscous, maxillary palpi black. Fore wing with slight grey tinge, the fuscous irroration thickest on the marginal areas, the outer part of inner margin and the outer area sometimes suffused with fuscous, a dark speck on middle of vein 1 and another at lower angle of cell; traces of a submarginal minutely dentate line or series of specks; a marginal series of black specks. Hind wing semilyaline white; the apical area tinged with fuscous. Underside of male with a black subcostal streak to fore wing from near base to beyond middle; hind wing with a black streak on base of vein 8.

Hab Siberia, Punjab, Sind; Bombay; Burma. Exp. 20-26 millim.

C (Pristarthma) Antennæ of male with a sinus at base of shaft with scale-teeth in it.

4365 Nephopteryx minutella, Rag Bull Soc Ent Fi 1885, p cl;
Mon Phyc p 326, pl xiv, fig 16, C & S no 4594
Oligochroa soricinella, Rag Nouv Gen p 20, C & S no 4593

Pale brown irrorated with grey. Fore wing with a black speck vol. iv

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at base of median nervure, a pale rufous antemedial patch on inner area, with black scales on its inner side, an indistinct medial line angled outwards on subcostal and median nervures, and inwards on vein 1, a dark speck at lower angle of cell; a pale submarginal line excurved between veins 5 and 2, a marginal series of dark specks. Hind wing semihyaline white with a slight ochreous tinge; the margin brown.

Hab. S. India, Ceylon, Burma. Exp, & 16, 2 16-20 millim.

- D. Antennæ of male with a sinus at base of shaft containing a large ridge of scales
- a. (Salebria). Antennæ of male not thickened and flattened.
- a'. Hund wing of male without streaks of black scales on the veins.
- 4366. Nephopteryx morosalis, Saalm Ber Senck Nat Ges 1879-80, p 307, Rag Mon Phyc p 370, pl x11, fig. 3

Head and collar rufous and whitish, thorax purplish fuscous, abdomen fuscous and ochreous. Fore wing purplish fuscous; the costal area suffused with grey or pinkish, the veins towards apex streaked with grey; two black medial specks below costa; a large reddish patch with a black and white spot on vein 1 on inner area, running along inner margin towards base. Hind wing semihyaline whitish, the outer area and a line through the cilia brownish

Hab W. and S Africa; Madagascar; Amur, N.W. Himalayas. Exp. 20-24 millim.

4367. Nephopteryx palumbella, Schiff. Wien Verz. p 138, Rag. Mon Phyc p 333

Tinea contubernella, Hubn Samml eur. Schmett. fig 72 Acrobasis undulatella, Wlk Cat xxxv, p 1711, C & S no. 4589.

Head and thorax rufous, suffused with grey, abdomen ochreous. Fore wing with the basal area rufous, with a grey patch on it, a sinuous black antemedial line, angled in cell, with a red band on its inner edge and two tufts of raised black scales below the cell the rest of the wing grey, with rufous suffusion on inner area, a black spot at lower angle of cell, a submarginal black line strongly incurved above vein 5, excurved to vein 2, then sharply angled inwards, a rufous band beyond it, a marginal black spot below apex, then a conjoined series of marks. Hind wing semilyaline whitish; the apical area, a marginal line, and a line through the cilia brownish.

Hab. Palmarctic region, Ceylon. Exp. 26-38 millim.

*4368. Nephopteryx eximiella, Rag Mon. Phyc p. 339, pl. xxvi, fig. 4

Head pinkish ochreous, thorax grey irrorated with vinous red;

abdomen ochreous tinged with fuscous. Fore wing narrow, ochreous olive-brown, the basal area and apical third of wing dull vinous red, a small white patch on basal part of costa, a large medial white patch on costa irrorated with a few black scales, and enclosing the black discocellular patch; an oblique antemedial white line, with some raised red scales on its outer edge, widening at costa, an oblique postmedial white line angled at middle; a white streak separating the ochreous and red areas on disk; outer area irrorated with white. Hind wing semihyaline brownish yellow, cilia paler.

Hab. Karáchi Exp. 18 millim

b Hind wing of male with the basal inner area clothed with ochreous scales, beyond which are short black streaks on the veins.

4369. Nephopteryx strigivenata, n sp

d Head ochreous and brown, with some black at base of palpi and on antennal tuft; thorax grey; abdomen fuscous brown, with some grey on dorsum of basal segments. Fore wing grey, irrorated with fuscous and purplish scales, the basal half of inner area with an ochreous tinge, and black subbasal specks on vein 1; a fine medial deep black line obsolete towards costa and bent outwards to inner margin, a fine black discocellular line, fine black submarginal and marginal lines, the former slightly bent outwards at vein 5. Hind wing hyaline, with the ochreous and black sexual markings, the apex fuscous, a fine fuscous marginal line and line through the cilia.

Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

- b. (Oligochroa). Antennæ of male thickened and flattened.
- 4370. Nephopteryx leucophæella, Zell Stettin. ent Zeit 1867, p 390; Rag Mon Phyc p 378, pl xii, fig 15
- J. Head and thorax fuscous black, abdomen fuscous. Fore wing fuscous black; a few grey scales on median nervure, a patch of grey scales on middle of inner margin and a black spot surrounded by grey scales on vein 1, the veins beyond the cell with a few grey scales on them and a series of short dark streaks. Hind wing pure white, the apex slightly tinged with fuscous Hab Calcutta Exp 24 mm.
- 4371. Nephopteryx akbarella, Rag Nouv Gen. p 20, Mon. Phyc. p 391, pl xv, fig 19, C & S no 4590

 Spermatophthora pulverulenta, Warr P Z S 1888, p 336 Rag

 Mon Phyc p 392, pl xli, fig 18, C & S no 4507

Ochreous Fore wing irrorated with fuscous, leaving an ochreous streak in the cell and another below median nervure; traces of three medial dark specks on the veins, the speck on vein 1

sometimes with a white spot on a rufous patch; traces of two discocellular specks, an indistinct curved postmedial series of dark specks sometimes with pale specks beyond them, a marginal series of dark specks. Hind wing white with a slight ochreous tinge

The variety pulverulenta is greyer and without the othreous

tinge

Hab W Africa; Punjab, Sind, Bombay, Ceylon; Burma. Eurp. 22-26 millim

- *4372 Nephopteryx sindella, Rag Mon Phyc p 880, pl. xh, fig. 16.
- Q. Head and thorax fuscous grey, legs and abdomen blackish Fore wing narrow, the outer margin rounded, uniform blackish brown, the apex somewhat paler; an oblique pale antemedial line angled inwards and paler on vein 1; a postinedial pale line outwardly defined by fuscous, slightly excurved at middle and angled inwards below vein 2, an interrupted marginal blackish line followed by a fine ochreous line. Hind wing semihyaline indescent white, the veins, costa, two marginal lines, and the cilia brownish

Hab. Sind. Exp. 23 millim.

- *4373. Nephopteryx nodicornells, Rag. Nouv Gen p. 21, Mon Phys. p. 386, pl. xm, fig 14, C & S no 4592.
- d. Antennæ much thickened, the tuft and basal joint large. Head, thorax, and abdomen reddish ochreous; frons whitish. Fore wing narrow, brownish ochreous, the base of inner margin irrorated with fuscous, the medial area brown, a pale antemedial line bordered with fuscous and slightly angled at middle; two large nearly conjoined brown discocellular spots, very obliquely placed, a postmedial pale line bent outwards at vein 5 and oblique towards inner margin; an indistinct marginal series of specks. Hind wing semihyaline ochreous, the apex tinged with brown; the outer margin slightly exceed below apex.

Hab. Lahore. Exp. 20 millim.

4374. Nephopteryx semirubella, Scop Ent Carn p 245, Rag Mon.
Phys p 416, pl xv11, fig 4, C. & S no 4588
Tinea cainella, Lunn Syst Nat x11, p 887
Tinea sanguinella, Hubn Samml eur. Schmett fig 65.

Palpi and head pinkish; antennæ brown; thorax and abdomen ochreous, the shoulders pink. Fore wing with a white fascia on costa, a pink fascia from base through the cell, widening to outer margin and apex, the inner area bright yellow, the cala pink. Hind wing pale brown, tanged with pink towards outer margin.

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Larva a dull bronze-black; the skin wrinkled and folded transversely, the dorsal lines indistinct, the head black, the stigmata and a large occillated patch on 1st somite black, with narrow white rings Feeds on Lotus, Hippocrepis, Trifolium, &c.

Hab Europe; Syria; Siberia, Japan; China; Dharmsála.

Exp. 24-32 millim

Genus EPICROCIS.

Epicrocis, Zell Isis, 1848, p 878 Canthelea, Wll. Cat xxxv, p 1726 (1866) Gabra, Wlk. Cat xxxv, p 1727 Candiope, Rag Nouv Gen p 14 (1888)

Type, E festivella, Zell

Range Ethiopian and Oriental regions to Australia

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed and acuminate; frons roughly scaled, thise thickly scaled, the outer spurs about half the length of inner. Fore wing with the apex rectangular, vein 3 from before angle of cell, 4, 5 well separated at origin, 10, 11 free. Hind wing with vein 2 from before angle of cell, 3 approximated to 4, 5 for some distance; 6, 7 from upper angle.

SECT I. Maxillary palpi of male filiform, hind wing with vein 7 anastomosing with 8.

A (Canthelea) Antennæ of male thickened. flattened, and simple.

4375. Epicrocis ægnusalis, Wik Cat xix, p 905, Rag Mon. Phys. p 234, pl ix, fig 11, C & S no 4570
Homeosoma gratella, Wik Cat xxvii, p 26
Homeosoma derasella, Suinh P Z S 1885, p 877, pl 57, fig 19;
C & S no. 4607

Pale olive-blown; the head and shoulders suffused with pink



Fig 53 -Epicrocis ægnusalis, & 1.

Fore wing with a diffused pink fascia from base, curving round to inner margin before middle, an obliquely curved antemedial pink band more or less obsolescent towards costa, and often conjoined in the cell to the pink discocellular patch, which sends an oblique pink

fascia to the apex and another to the irregular marginal pink band at outer angle, cilia tinged with pink towards apex. Hind wing ochreous; the apical area suffused with fuscous.

The markings of the fore wing vary considerably in the extent and brightness of the pink

Hab. Madagascar; China; throughout India, Ceylon, and Burma; Sumatra; Australia. Exp. 20 millim.

4376 Emerocis lateritialis, Wil. Cat. xxvu, p. 74, Rag. Mon. Phyc. p 236, pl xxu, fig 16, C & S no 4571

Nephopteryx concolorella, Wik Cat xxxv, p 1721

Nephopteryx laxalis, Swink. P Z S 1885, p 877; C & S.

Head and thorax brownish pink; abdomen ochreous. Fore wing pale brown, suffused with pink and irrorated with fuscous except on inner area, the costa whitish, very obscure dark diffused oblique antemedial and erect medial bands. Hind wing pale fuscous, the cilia whitish.

Hab. The plans of India, Ceylon, and Burma, Andamans.

Exp 20 millim.

B. (Candiope). Antennæ of male critated and not thickened.

4377. Epicrocis joannisella, Rag Nouv Gen. p 14, Mon. Phyc. p. 223, pl. x, fig 12, C. & S no. 4569

Head whitish; thorax pale red-brown, suffused with grey and irrorated with fuscous, abdomen grey-brown. Fore wing with the basal area pale red-brown, traversed by an oblique band of grey and fuscous scales, this area bordered by an oblique whiteedged dark line angled inwards on vein 1, the outer area grey irrorated with fuscous, a black and white speck at lower angle of cell, with some brown suffusion below it; a red-brown marginal band, inwardly edged by a white line bent inwards to costs and with some black points on it; a marginal series of black specks, the cha grey and fuscous. Hind wing semilyaline, with a slight brown tange.

Hab Aden; S. India; Ceylon Exp 16 millim.

4378. Epicrocis uberalis, Swinh. P. Z. S. 1884, p 528, pl 48, fig 10 C & S no 4470

Head and thorax white irrorated with brown; abdomen white. Fore wing brown, thickly irrorated with white; a very obliquely curved antemedial white line, the median nervure streaked with white, expanding and embracing a dark spot at lower angle of cell, the veins beyond upper angle streaked with white, an oblique submarginal white line from below apex, a white marginal band, with a series of dark specks on the margin. Hind wing white, with marginal brown line and line through the cilia

Fab St. Vincent, Karáchi Exp 20 millim.

SECT. II. (Epicrocis) Palpi of male with the 2nd joint hollowed out and containing the maxillary palpi, which end in a long tuft of hair, the 3rd joint short, antennæ with the base of shaft slightly sinuous and with a small ridge of scales on it, hind wing with vein 8 free.

4379. Epicrocis festivella, Zell Isis, 1848, p. 878, Rag. Mon Phyc. p. 438, pl xii, fig 12, C & S no 4595
Pyralis ratoalis, Wlk Cat xix, p. 916 Scopula albigeralis, Wlh Cat xxxiv, p 1468 Gabra tinealella, Wlk Cat xxxv, p 1727

Head and thorax rufous, marked with grey, abdomen ochreous, fuscous towards extremity Fore wing with the basal area bright chestnut, bounded by an oblique white band often diffused outwards; the outer area chestnut, variegated with grey and purplish shades; a discocellular black lunule with a diffused white patch beyond it, two dark somewhat irregular submarginal lines becoming obsolescent below vein 4, the cilia grey, with dark lines through them. Hind wing semihyaline and pale ochreous.

Hab S Africa, Dharmsála, Ceylon, Java

20 millim

4380 Epicrocis hilarella, Rag Nouv Gen p 22, id. Mon Phyc. p 438, pl x11, fig 7

Differs from festivella in the white band of fore wing bounding the basal area being angled inwards on vein 1, a speck at lower angle of cell, with a white streak beyond it instead of the lunule and patch, the marginal area fuscous, obscuring the lines wing browner

Hab. China, Murree; Simla; Ceylon Exp 20 millim.

Genus HYPARGYRIA.

Hypargyria, Rag Nouv Gen p. 9 (1888)

Type, H. metaliferella, Rag

Range Neotropical and Ethiopian regions; Punjab; Ceylon.

Palpi upturned, the 2nd joint not reaching vertex of head, the 3rd long, thick and blunt; maxillary palpi filiform, antennæ of male with the basal joint much dilated at summit, and giving off a curved hook on inner side, the shaft thickened and flattened; mid tibiæ dilated, with a fold containing an expansile tuft of long hair, anal tuft very large Fore wing with vein 3 from near angle of cell, 4, 5 stalked; 10 free, male with the base of costa and vem 12 slightly thickened below. Hind wing with the cell rather short, vein 2 well before angle, 3 from angle; 4, 5 on a long stalk, 6, 7 stalked, 7 anastomosing with 8, hyaline streaks in interspaces of basal area

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4381. Hypargyria metalliferella, Rag Nouv Gen p. 9, Mon. Phys. p 123, pl 1v, fig 22, C & S no 4565

Ochreous brown irrorated with grey, male with the anal tuft jet-black. Fore wing tinged with vinous red, the costal area

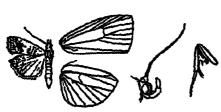


Fig. 54.—Hyparyyria metalliferella, d. }

broadly suffused with white, two dark specks at base of costs, a broad ochreous antemedial band, with a ridge of raised vinous scales before it; traces of a dark speck at upper angle of cell, and of an oblique submarginal line. Hund wing semi-

hyalme, the veins darker; the apical area opalescent, a dark marginal line. Underside with black spots below the thickenings of costa and vein 12; the outer half of fore wing and apical area of hind wing brilliant silver in the male.

Hab. W. and E. Africa; Punjab, Ceylon. Exp. 17-22 millim.

4382. Hypargyria ferrella, n sp.

Q. Ferruginous brown, with slight ochreous irroration. Fore wing with traces of pale sinuous medial and submarginal lines; a dark costal fascia from the medial line to apex, slight dark streaks on the veins beyond lower angle of cell. Hind wing semi-hyaline white, the margin tinged with ochreous.

Hab Ceylon (Pole). Evp. 18 millim Type in B. M.

Genus MYELOIS.

Myelois, Hubn. Verz. p 371 (9 1818)

Type, M cribiella, Hubn, from Europe.

Range Universally distributed

Palpi upturned, reaching vertex of head, and thickly scaled; maxillary palpi filiform, frons thickly scaled, these smoothly scaled, the outer spurs about two-thirds length of inner. Fore wing rather long and narrow, the apex rounded; vein 3 from before angle of cell, 4, 5 on a long stalk; 10, 11 free. Hind wing with the cell half the length of wing; vein 2 from well before angle; 3 from angle, 4, 5 on a long stalk, 6, 7 from upper angle.

In the typical section the antenna of male are cliated.

SECT II. Antennes of male bipectinated, with short branches for about two-thirds length.

4383. Myelois pectinicornella, n. sp.

d. Grey arrorated with fuscous Fore wing with the veins streaked with fuscous; a dark-edged irregularly dentate antemedial grey line a discocellular band, a minutely dentate sub-

marginal dark-edged grey line, a marginal series of dark specks. Hind wing semily aline tinged with fuscous, a marginal fuscous line.



Fig 55 - Myelois pectinicornella, &

Hab Bhután (Dudgeon) Type in B M Evp. 30 millim

Genus HYPSIPYLA

Hypsipyla, Rag Nouv Gen p 10 (1888)

Type, H robusta, Moore Range Himalayas, Ceylon

Palpi uptuined and slender, the 2nd joint reaching above vertex of head, the 3rd long and acuminate, maxillary palpi filitorm, antennæ of male somewhat thickened and ciliated, mid and hind tibiæ with tufts of spinous hair on outer side at base and extremity Fore wing narrow, vein 2 from near angle of cell, 4, 5 approximated for a short distance, 10, 11 free Hind wing with the cell half length of wing, vein 2 from well before angle, 3 from angle 4,5 shortly stalked, 6,7 from upper angle, 7 anastomosing with 8

4384. Hypsipyla robusta, Moore, Lep Ceyl 111, p 365, pl 184, figs 4, 4a (larva), Rag Mon Phuc p 139, pl vi, fig 12 C & S no 4598 Hypsipyla pagodella, Rag Nour Gen p 10, C & S no 4566

Pale rufous brown irrorated with black and grey Fore wing



Fig 56 —Hyps'pyla robusta, J. 1

with the costal strongly suffused with the grev veins streaked with some ohve-yellow on base costa and median nervure, on extremity of median nervure and discocellulars, traces of a dark

sinuous medial line, with a dark patch beyond it on inner margin, and of a very highly dentate oblique dark postmedial line bent outwards between veins 5 and 2 Hind wing semihyaline white. the costal area suffused with fuscous, the base of ciha pale rufous

Larva purplish grey, with a few short hairs; somites spotted with black and with a lateral series of red spots, head and dorsal patch on 2nd somite black Feeds in the small branches of mahogany. Pupa purplish brown, in an elongate silken cover

Hab Sımla; Dharmsála; Sıkhım, Ceylon. Exp., & 26-32.

2 28-42 milum.

Genus PHYCITA.

Phycita, Curt Brit Ent vi, p 283 (1840)
Dioryctria, Zell Isis, 1846, p 732
Piesmopoda, Zell Isis, 1848, p 863
Elasmopalpus, Blanch Gay's Chili, vii, p 104 (1852).
Guastica, Wik Cat xxvii, p 80 (1863)
Calguia, Wik Cat xxvii, p 83 (1868)
Volobilis, Wik Cat xxvii, p 111
Magiria, Zell Stettin ent Zeit 1867, p 392
Cabragus, Moore, Lep Ceyl iii, p 370 (1886)
Hydaspia, Rag Nouv Gen p 22 (1888)
Sigmarthria, Rag Nouv Gen p 28.
Cavipalpia, Rag Mon Phyc p 154 (1894)

Type, P spissicella, Fabr, from Europe

Range Universally distributed

Palpi upturned, the 2nd joint reaching vertex of head, tabus thickly scaled, the outer spurs about two-thirds length of inner. Fore wing rather narrow, the costa arched; the apex rectangular, vein 3 from close to angle of cell; 4, 5 approximated for a short distance, 10, 11 free Hind wing with the cell about one-third length of wing, vein 2 from well before angle, 3 from angle; 4, 5 on a long stalk, 6, 7 stalked.

- SECT. I. Palpi of male with the second joint not hollowed out to receive the maxillary palpi
- Antennæ of male with a large sinus at base of shaft, containing a large hollowed-out tuft of scales, the shaft then thickened and flattened
- s. (Piesmopods) Maxillary palps of male filiform, fore wing with no ridge of hair on vein 1 below.

4385 Phycita bipartella, n sp

Head, thorax, abdomen, and basal part of fore wing greyish ochreous, slightly irrorated with fuscous, metathorax with a small rufous tuft. Fore wing with a slight rufous tinge at base, followed by thicker fuscous irroration, the pale basal area bounded by a slightly sinuous rufous line, the outer half of wing fuscous, becoming grey towards the margin; two black discocellular specks and a slight ochreous lunule, a marginal series of black specks. Hind wing semilyaline white, with a marginal brown line, a line through the chia

Hab Ceylon (Pole) Eap 20 milhm. Type in B M

- b. (Guastica) Maxillary palps triangularly scaled and flattened against the frons, fore wing with a ridge of long ochreous hair covering a streak of black membrane on vein 1 below
- 4386 Phycita semilutea, Wik Cat xxvii, p. 81
 Piesmopoda auropurpurella, Rag Bull Soc. Ent Fr 1889, p ccxviii,
 Mon Phyc p 161, pl vi, fig 24

Head vinous red, antennæ with the tuft black, the shaft

ochreous, thorax and abdomen yellow. Fore wing with the basal half bright yellow, the costa rufous, irrorated with white; the outer half of wing chestnut, becoming purplish fuscous towards the margin, the costal area broadly suffused with white, slight postmedial white streaks on veins 3 and 4; a minutely waved submarginal white line, and some white irroration just inside the margin. Hind wing pale fuscous

Hab. Bhutan, Nagas; Borneo; New Guinea Exp 18 millim.

B. (Dioryetria) Antennæ of male with a small tuft of scales on shaft near base.

4387. Phycita abietella, Schiff Wien Verz. p. 138

Tinea decuriella, Hubn Samml eur Schmett fig 74

Tinea sylvestrella, Ratz Fortz 1, p 244, pl 15, fig 1

Pinipestis abietivorella, Grote, Bull US Geol Surv 1v p. 701.

Head, thorax, and abdomen grey and fuscous Fore wing grey, thickly irrorated and suffused with fuscous; a dark brown patch on base of inner area, a dark antemedial line with a grey band on its inner edge, angled outwards below costa and inwards on median nervure and vein 1, a large brown patch inside the grey band, less prominent towards costa, a prominent quadrate discocellular grey spot with a brown patch below it, a grey-edged dark postmedial line angled inwards at vein 6, then bent outwards and minutely dentate some brown suffusion beyond the line; a prominent marginal series of dark specks Hind wing semihyaline with a brown tinge, the cilia white, with a brown line at base

The prominence of the grey and fuscous markings of fore wing

varies considerably

Hab United States; Europe, Japan, Simla Exp 22-34 millim

4388 Phycita dentilinella, n sp.

Q. Head, thorax, abdomen, and fore wing brown irrorated with grey; the last with oblique highly dentate white antemedial line, a dark discocellular lunule, a minutely dentate dark postmedial line slightly bent outwards at vein 5 and defined by grey on the outer side, a marginal series of dark specks. Hind wing pale brownish and semihyaline, the veins and apical area browner, ciha grey, with a brown line through them

Hab Manipur (Doherty) Exp. 32 millim Type in coll Elwes.

4389 Phycita cyclogramma, n. sp.

Q Head, thorax, and abdomen grey irrorated with red-brown and fuscous. Fore wing grey irrorated with fuscous, a red-brown fascia on base of inner margin, a large pale red antemedial patch on inner area, surrounded with white and with a semicircular tuft of raised black scales on its inner side; an obliquely curved antemedial dark line, the outer half of costal area suffused with pink;

a pink discocellular lunule, with an oblique fuscous streak below it, a grey submarginal line edged with pinkish and angled inwards below costs, a marginal series of dark specks. Hind wing semi-hyaline pale fuscous, the cilia white, with a fuscous line through them

Hab Nágas (Doherty), Ceylon (Green) Exp 28 mm. Type m B. M

C Antennæ of male with the basal joint dilated and with a strong tooth on inner side, the shaft with long cilia

4390. Phycita olivalis, n sp

d. Head and thorax olive-brown, the vertex of head grey; abdomen fuscous, pale on dorsum. Fore wing olive-green; a subbasal triangular white patch on costa irrorated with pink, its apex not reaching inner margin, a large white postmedial patch on costa irrorated with pink, with a black speck on it at upper angle of cell, extending along costa to the submarginal line, its apex on vein 2, a nearly straight submarginal, rather indistinct white line interrupted below costa by the oblique clive fascia from apex, a large white patch on middle of outer area, a series of black marginal specks. Hind wing semily aline brown

Hab Ceylon (Yerbury, Pole). Exp 18-20 millim Type in B M.

D. Males unknown

a. From with a conical prominence, tibic without tufts of spinous hair.

4391. Phycita chloropterella, n sp

A Head, thorax, and abdomen olive-yellow, palpi with the 3rd joint fuscous, from and basal joint of antennæ in front fuscous, the collar, extremity of patagia, and metatholax vinous red. Forewing olive-yellow, the basal half of costa blackish, the outer half of costal area suffused with white and irrolated with olive and pale rufous scales, faint traces of a curved antemedial white line on costal area, traces of a white submarginal line. Hind wing fuscous brown, the cilia ochreous.

Hab Ceylon (Green), Rangoon, Borneo. Exp. 20 millim.

Type in B M.

b Frons not prominent, mid and hind tibic with tufts of spinous have on outer side at base and extremity

4392. Phycita pachylepidella, n sp.

Q Head, thorax, and abdomen brown irrorated with grey and fuscous. Fore wing with the basal area pale brown, becoming grey towards the antemedial line, which consists of a ridge of raised black scales, the basal costal area irrorated with rufous, a pale

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brown patch on outer edge of the antemedial line not reaching the costa; a large diffused triangular blackish patch irrorated with grey and pink with its apex on vein 1, including the two discocellular specks and extending almost to the black-outlined grey submarginal line which is angled inwards on vein 5, a marginal series of dark specks. Hind wing semihyaline; the veins brown, the cilia grey, with a fuscous line through them.

Hab Bhutan (Dudgeon); Nagas (Doherty) Exp. 18 millim.

Type in B M

- 4393. Phycita steniella, Rag Bull Soc Ent Fr. 1890, p cexiu, id. Mon Phyc p 163, pl vi, fig 23
- Q. Grey-brown, legs white banded with black. Fore wing with white costal fascia irrorated with pink and black scales and diffused over the cell and area beyond it; a black-edged conical rufous patch from inner margin just before middle to subcostal nervure, two black discocellular specks; a grey submarginal line defined by fuscous and slightly bent at veins 6 and 2, the inner area tinged with rufous. Hind wing semilyaline white, the apex tinged with fuscous, both wings with fine dark marginal line and line through the cilia.

Hab. Ceylon, Shan States. Esp. 16 millim.

c. Frons not prominent, tibiæ smoothly scaled.

4394. Phycita albilavalis, n sp

2. Vinous red-brown irrorated with fuscous Fore wing with the costal area and cell suffused with white, a white subcostal fascia being most prominent, a few grey scales an inner and outer areas, two black discocellular specks, a submarginal grey line bent outwards from vein 6 to near apex, straight from vein 6 to inner margin, the veins of outer area reddish. Abdomen and hind wing pale brown.

Hab. Nágas, Ceylon. Exp. 20 millim. Type in B M.

4395. Phycita obliquifasciella, n sp

Q. Head and thorax clothed with fuscous and pink scales. Fore wing brown irrorated with grey; a pink basal patch with black outer edge; an oblique pink and grey antemedial band, with a sinuous dark line near its inner edge and a ridge of raised dark scales on its outer edge, the outer half of costa suffused with pink, two indistinct dark discocellular specks; an indistinct submarginal dark line excurved and minutely dentate between veins 5 and 2, a marginal series of dark specks. Hind wing semihyaline with a marginal brown line.

Hab Dharmsála (Hocking) Exp. 20 millim. Type in B. M

- 4396 Phyorta chentella, Zell Stettin ent Zeit 1867, p 896, Rag Mon, Phyc p 183, pl xi, fig 18, C & S no 4567
 Phyorta chentulella, Rag Mon Phyc. p 184, pl xxvi, fig 3
- Q. Head, thorax and abdomen pale red-brown, the collar grey Fore wing pale red-brown, suffused with grey and slightly irrorated with black, a sinuous grey medial line outlined with brown, and with a triangular red-brown patch on its inner edge not reaching the costa, an indistinct discocellular lumule; a black speck at lower angle of cell, and short black streaks on veins 3, 4, 5, just beyond the angle, a submarginal brown-outlined grey line excurved between veins 5 and 2; a prominent marginal series of black specks. Hind wing indescent semilyaline with an ochrous tinge

The form chentulella is fuscous and grey without any red-brown

tinge, the hind wing greyish white.

Hab. Calcutta, Bombay, Ceylon. Exp. 22 millim.

4397 Phycita eulepidella, n sp

Q. Head and thorax fuscous thickly irrorated with blue-grey; abdomen fuscous, with pale segmental rings. Fore wing fuscous thickly irrorated with blue-grey and with a few purple scales on costa and outer area; an oblique dark line inwardly defined by grey from costa before middle to middle of inner margin, two dark discocellular specks; a postmedial dark line outwardly defined by grey and slightly excurved between veins 5 and 2; a marginal series of dark specks. Hind wing othereous white; the apical area fuscous, a brown marginal line and line through the cilia.

Hab Kandy, Ceylon (Green). Exp. 18 millim. Type in B. M.

4398. Phycita proximalis, Wik Cat xxvii. p. 68

Q. Head, thorax, and abdomen grey irrorated with fuscous, collar ochreous brown. Fore wing grey irrorated with fuscous, the costa and outer half of wing irrorated with pinkish brown, an antemedial dark-edged whitish line bent inwards to costa, with a large olive patch on its inner edge and some reddish scales below the costa, two dark discocellular specks, a grey dark-edged postmedial line angled inwards below costa, bent ontwards and minutely dentate between veins 5 and 2, a marginal series of dark specks. Hind wing semihyaline with a brownish tange, a brown marginal line and a line through the cilia.

Hab. Nilgiris, Borneo. Eap. 28-32 millim

4399 Phycita majoralis, n sp

Q. Head, thorax, and abdomen brown. Fore wing fuscous brown irrorated with grey, the base brownish; an antemedial ridge of raised scales, with an ochreous band beyond it not reaching the costa, an indistinct pale antemedial line; an ochreous discocellular patch emitting streaks along the veins beyond the cell;

a pale submarginal line excurved between veins 5 and 2, a marginal series of black specks. Hind wing pale and semihyaline, the apical area, veins, margin, and a line through the cilia brown

Hab Bhután (Dudgeon) Exp. 34 millim Type in B. M.

4400. Phycita hemixanthella, n sp

Q. Head, thorax, abdomen, and basal half of fore wing ochreous with a rufous tinge, the pale area of fore wing bounded by a slightly sinuous dark medial line, with a pale line on its inner edge below the cell and emitting a dark costal spur on its outer side, the outer area olive-brown, an indistinct dark discocellular band, a slightly sinuous white submarginal line, with grey costal patch inside it, the area beyond it rufous, with some white at apex and fuscous on the margin. Hind wing semihyaline, the veins, apical area, a marginal line, and a line through the cilia brown.

Hab. Nága Hills (Doherty) Exp. 26 millim. Type in coll

Elwes.

- SECT II (Cavipalpia) Palpi of male with the 2nd joint hollowed out to receive the maxillary palpi, which are flat and triangular; antennæ strongly ciliated.
- *4401. Phycita translucidella, Rag Mon Phyc p 154, pl vi, fig 16.
- o. Pale ochreous, patagia reddish Fore wing with a medial line of raised scales slightly oblique and diffused outwards along costa; a submarginal pale line slightly outlined with brown, hardly excurved at middle and ending at outer angle; cilia with two fine dark lines at base. Hind wing semihyaline white; the costa and veins slightly darker

Hab Hyderabad, Sind. Exp. 20 millim.

- SECT. III. Palpi of male with the 2nd joint dilated and hollowed out to receive the brush-like maxillary palpi.
- A. Antennæ of male with a sinus containing a large hollowed-out tuft of scales at base of shaft.
 - a. (Volobilis) Male with the anal angle of hind wing lobed and fringed with very long hair.
- 4402. Phycita biplaga, Wik Cat xxvii, p. 111
- of. Maxillary palpi ochreous Head and thorax bright redbrown, abdomen ochreous. Fore wing bright red-brown, the base of costa blackish, a pale antemedial line oblique from costa to median nervure and with a large quadrate costal black patch beyond it extending to lower angle of cell, where there is a white speck, a blackish submarginal line angled at vein 4 and with traces of

another line beyond it, a marginal series of dark specks. Hind wing dark fuscous, the cilia and fringe at anal angle ochreous.

2 with the hind wing pale, the apex tinged with fuscous.

Hab. Ceylon, Borneo. Exp. 24 millim.

b. (Maguna). Male with no lobe and fringe at anal angle of hind wing.

a' Antennæ of male ciliated.

4403. Phycita imparella, Zell Stettin ent Zeit 1867, p 393, pl 11, fig 2, Rag Mon Phyc p. 320, pl vii, fig 7, C & S no 4597

Maxillary palpi of male pinkish. Head, thorax, and abdomen brown irrorated with grey. Fore wing reddish brown irrorated with black, the costal area suffused with white and irrorated with fuscous, this area enclosing a dark streak in base of cell, sending an antemedial tooth towards inner margin, and somewhat contracted at end of cell, the veins beyond the cell streaked with black and with a series of white specks on them; a marginal series of black specks. Hind wing pale and semilyahne, a brown marginal line and a line through the cilia.

Hab. Sikhim. Exp., of 32, 9 40 millim.

b'. Antenna of male with uniseriate pectinations.

4404. Phycita pectenella, n. sp

d. Grey Fore wing with the ground-colour whitish, thickly irrorated with fuscous, a fuscous-edged oblique sinuous white antemedial line with large rufous patch before it not reaching the costa and with black speck on its inner edge, two obliquely-placed black discocellular specks; an irregular pale submarginal line with dark line on its inner edge and dentate between veins 6 and 2 Hind wing pale, semilyaline, with fine dark marginal line.

Hab. Ceylon (Pole) Emp 18 millim. Type in B. M.

B. (Elasmopalpus) Antennæ of male with a large ridge of scales in the sinus at base of shaft, from with a conical tuft.

4405. Phycita jasminophaga, n. sp.

Head and thorax grey irrorated with brown; abdomen brown. Fore wing grey irrorated with brown, an obliquely waved antemedial grey line outwardly defined by brown, two brown discocellular specks; a submarginal brown-outlined grey line, slightly excurved and minutely dentate between veins 5 and 2, a marginal series of dark specks. Hind wing semilyaline with a slight brown tinge, a brown marginal line and a line through the cilia.

Larva dull green, head with several diagonal stripes on each

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side, the 1st somite reddish, the 2nd black, a dark dorso-lateral stripe, below which is a small black spot on each somite

Feeds amongst the flower-buds and young leaves of Jasminum

sambac, often completely mining every flower-head.

Hab. Bhutan (Dudgeon), Ceylon (Green) Exp. 20 millim. Type in B. M

- C. (Hydaspia). Antennæ of male thickened and laminate, with a large ridge of scales in the basal sinus
- 4406. Phycita dorsipunctella, Rag Nouv Gen p 22, id Mon. Phyc p 440, pl xu, fig. 9, C & S no 4596

Head and thorax pale rufous, the antennal ridge of scales black; abdomen ochreous. Fore wing irrorated with a few black scales; a broad white costal fascia irrorated with pink, the cell and area beyond it and the greater part of interno-median interspace chestnut, the inner and outer areas paler, with a pinkish tinge; a black spot varying in size on middle of vein 1, the veins beyond the cell often streaked with black, especially in the female. Hind wing pale brown; chia grey, with a brown line through them.

Hab Kashmir; Punjab, Nilgiris; Ceylon Exp, & 22,

♀ 26 millim.

- D. Antennæ of male thickened and laminate, with a slight sinus and ridge of scales at base.
- 4407. Phycita flavitinctella, Rag Mon Phyc p 418, pl xvii, fig 9

Head whitish; thorax and abdomen ochreous Fore wing with the base yellow, followed by an obliquely curved fuscous-irrorated grey band extending on costa almost to the base, its outer edge with a ridge of raised red scales followed by a medial yellow band; the outer area with the disk ochreous, the margins grey irrorated with fuscous Hind wing semilyaline; the apex and margin fuscous.

Hab. Poona; Ceylon. Exp 16 millim

- E Antennæ of male with long uniseriate branches for two-thirds length, the base of shaft slightly thickened with scales
- 4408. Phycita hyemalis, Butl P Z S 1880, p 689, Rag Mon Phyc p 377, pl xh, fig. 17

Head and thorax glossy black, abdomen fuscous. Fore wing glossy black; some grey scales and black specks on median nervure and the veins beyond the cell, some grey scales and a black speck and sometimes also a white spot on middle of vein 1; the outer area irrorated with grey scales, a marginal series of black specks Hind wing pure white, the apical area, a marginal line, and a line through the ciha brownish.

Hab Formosa, Ceylon. Evp. 26 millim Vol. IV.

H

- F. (Calgum) Palpi long, in female with a tuft of hair at eviremity of 2nd joint behind, the 3rd joint thickly scaled, the maxillary palpi long, in male the brush-like maxillary palpi very long, the 3rd joint of palpi curved and pointing forwards at extremity, antennæ with the sinus and ridge of scales very large; the shaft with fasciculate cilia, hind tibiæ thickly fringed with hair and with a tuft of long hair from base
- 4409. Phycita defiguralis, Wil. Cat xxvii, p 88
 Cabragus auritipalpus, Moore, Lep Ceyl iii, p 371, pl 184, fig 9,
 Rag Mon Phyc p 442, pl xiii, fig 23, C & S no 4611
 Sigmarthria palpella, Rag Nouv Gen p 23
- o. Head and thorax fuscous black, maxillary palpi ochreous; abdomen ochreous Fore wing with the base chestnut, an oblique



Fig 57 -Phycita defiguralis, 6 1

grey antemedial band, with whitish outer edge and diffused purplish fuscous beyond it, widest at costa, the rest of the wing greyish, two dark discocellular specks, a dark patch on apical part of costa, a grey submarginal line defined by brown, bent outwards and minutely dentate between veins 5 and 2; a marginal series of dark specks. Hind wing fuscous

2 with the vertex of head pink, the thorax purplish, the hind

wing semihyaline and almost white.

Hab Nilgiris, Ceylon; Borneo. Exp. 22 millim.

Genus RHODOPHÆA

Rhodophæa, Guen Eur Microlep Ind Meth p. 74 (1845). Eurhodope, Hubn Verz p 371 (* 1818), non descr. Acrobasis, Zell Isis, 1848, p 606 Aurana, Will Cat xxvii, p 122 (1863) Succadana, Rag Nouv Gen Phyc p 13 (1888) Mineola, Hulst, Trans Am Ent Soc 1890, p 126 Ancova, Rag Mon Phyc p. 149 (1894)

Type, R advenella, Zinck, from Europe. Range. Universally distributed.

Palpi upturned, the 2nd joint hardly reaching vertex of head, the 3rd acuminate, maxillary palpi filiform. Fore wing subtriangular, vein 3 from near angle of cell, 4, 5 from angle, 10 free. Hind wing with vein 2 from well before angle of cell; 3 from angle, 4, 5 stalked, 6, 7 from upper angle or shortly stalked, 7 anastomosing with 8

SECT. I Antennæ of male with the basal joint conically dilated with scales, the basal part of shaft with a sinus and a ridge of scales

4410. Rhodophæa heringi, Rag Ann. Soc Ent Fi 1888, p. 282, and Mon Phyc p. 73, pl vin, fig 1, C & S no 4562

Brown suffused with white; palpi at sides, the dilated joints of antennæ of male, and anal tuft blackish. Fore wing with the costal

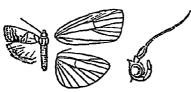


Fig 58—Rhodophæa heringi, 3

area whiter, the inner and outer areas less suffused, a tuft of raised scales on base of median nervure, a medial line oblique from costa to cell, where it joins a brown-edged and brown-centred grey conical patch extending to inner margin with a

ridge of raised scales on its inner edge, two dark discocellular specks, a dark submarginal line slightly bent outwards at vein 5, then minutely dentate, a dark mark beyond it from costa to vein 6; an obscure marginal series of dark specks Hind wing pale fuscous brown, with darker marginal line

Hab Nilgiris, Ceylon Erp. 18-22 millim

SECT II Antennæ of male with the basal joint strongly dilated and indented on hinder side near the apex, the base of shaft deeply excised, from hollowed out; palpi with the 3rd joint short and blunt

4411 Rhodophæa ligeralis, Will Cat xxvii, p 37, C & S no 4563.

of Grey suffused with brown and purple, palpi fuscous, the end of second joint white, from and vertex of head white. Fore wing with the basal area greyish and irrorated with a few black scales, the medial area purplish brown; a deep black medial line, slightly curved from costa to vein 1, then bent outwards, with purplish inside it expanding into a large patch on inner area, a deep black submarginal line excurved between veins 6 and 2, bent outwards to inner margin and with an indistinct purplish line beyond it; a deep black marginal line. Hind wing pale brownish and indescent, the costa browner, a dark marginal line and line through the cilia Hab. Ceylon Exp 20-22 millim.

SECT III (Acrobasis) Antennæ of male with a tooth on inner side of basal joint.

*4412. Rhodophæa epigrammella, Rag Mon. Phyc p 122, pl vi, fig 9

d Grey-brown Fore wing with a large brown-irrorated white triangular patch on basal part of costa, its apex on inner margin, H 2

with the dark antemedial line of raised scales on its outer edge; a similar larger dark-edged postmedial patch including the two prominent black discocellular spots, the postmedial line pale with dark edges, very slightly sinuous and arising from a dark costal oblique spot, outer area whitish, with interrupted dark marginal line. Hind wing brownish grey, with dark marginal line.

Hab. Rangoon. Exp. 16 millim.

SECT. IV. (Ancova). Antennæ of male with long cilia

- 4413 Rhodophæa meridionalis, Wik Cat xxvii, p 64; Rag Mon. Phyc p 150, pl xli, fig 7, C & S no 4568.
- o. Head, thorax, and abdomen pale olive-brown slightly irrorated with fuscous. Fore wing pale olive-brown irrorated with fuscous; some ferruginous suffusion between vein 1 and median nervure; a patch of ferruginous scales in end of cell, a black discocellular lumile with an oblique line from it to costa, a black postmedial line excurved between veins 5 and 2, some rufous scales inside it, and a rufous line beyond it bent outwards to costa, a prominent marginal series of dark specks. Hind wing indescent yellowish white; a dark marginal line and a line through the cilia. Underside with the basal half of fore wing and basal half of costa of hind wing bright ferruginous

2. More olive-green; fore wing with no ferruginous suffusion on upper or under sides, and with purplish patches before the

medial and postmedial lines.

Hab. Moulmein, Ceylon. Exp. 24 millim.

SEOF V. (Rhodophæa). Antennæ of male normal and slightly culated.

- 4414. Rhodophæa duplicella, Rag Bull Soc Ent Fr 1890, p cexni; id Mon Phyc p 79, pl v, fig 18
- 3. Black-brown; abdomen pale fuscous. Fore wing with the base blackish, an oblique silvery-grey antemedial band broad at costa, a grey spot on its inner edge on vein 1, and a yellow band on its outer edge from cell to inner margin, a silvery-grey traaugular postmedial patch on costa embracing the two black discocilular specks, an indistinct sinuous grey submarginal line and slight grey marks on the margin.

Hab. Shan States. Exp 16 millim.

4415 Rhodophæa actiosella, Wik Cat xxvii, p 122; Rag Mon.
Phyc p 68, pl. vi fig 8, C β S no 4558
Nephopteryx lentalis, Swinh P Z S 1885, p 877, pl 57, fig 18.

Greyish brown; palpi with the 2nd joint grey banded with brown. Fore wing with oblique triangular subbasal pink-speckled white patch tapering to its apex on inner margin, a semicircular

pink-speckled white patch on costa from before middle to near apex with the two discocellular specks on it, the space between it and subbasal patch and also beyond it darker than the ground-colour, a dark-edged white submarginal line slightly excurved between veins 6 and 2, the margin suffused with white, with a marginal series of dark specks. Hind wing pale, suffused with tuscous towards outer margin and with a dark marginal line

Hab. W. Africa; Nágas, Karáchi, Bombay, Ceylon. Exp.

18 millim.

4416. Rhodophæa tenebralis, n sp.

Q. Fuscous brown irrorated with grey Fore wing with the cell and disk suffused with grey, the medial dark line erect, interrupted in cell and below median nervure, an obscure grey patch with brown spot on it inside the line on inner area, two very prominent dark discocellular spots, a minutely dentate dark postmedial line excurved between veins 6 and 2 and with dentate grey line on its outer edge; a marginal series of dark specks. Hind wing uniform semilyaline brown.

Hab. Sikhim (Dudgeon). Exp 26 millim Type in B. M.

4417 Rhodophæa rufimarginella, n sp

Q. Head ochreous, the palpi pink at base; collar purple; thorax dark brown. Fore wing very dark red-brown, the basal area suffused with purple, an indistinct pale submarginal line joined at outer angle to the bright red marginal band; cilia brown Hind wing pale semihyaline brown, the veins and margin dark; a pale line at base of cilia, vein 7 becoming coincident with 8

Hab. Bhután (Dudgeon) Exp 14 millim. Type in B. M

Genus SPATULIPALPIA.

Spatulipalpia, Rag. Mon. Phyc p. 19 (1894)

Type, S effosella, Rag

Range N E and S India, Burma, Ceylon.

Palpi upturned, male usually with the 2nd and 3rd joints, or the 3rd joint only, fringed on both sides with long curved scales, which form a large hollow on inner side; vertex of head usually with a large and deep hollow, antennæ usually with the basal joint dilated and hollowed out, the shaft thickened and flattened, anal tuft large; female with the palpi, vertex of head, and antennæ normal. Fore wing with vein 3 from near angle of cell; 4, 5 closely approximated for a short distance, 10, 11 free Hind wing long, the apex acute, the cell extremely short, hardly one-fifth of wing, veins 3, 4, 5 from angle, 6, 7 on a long stalk, 7 anastomosing strongly with 8.

- SECT I. Palpi of male with the 2nd joint triangular, immensely dilated with curved scales and hardly reaching vertex of head, the 3rd invisible; mixillary pulpi with a tuft of long scales from extremity antennæ with broad laminæ, the shaft not excised, mid tibiæ not dilated fore wing of moderate breadth, with no costal fold and flap of scales
- 4418 Spatulipalpia effosella, Rag Mon Phyc p 20, pl xviii, fig 2
- o. Ochreous brown irrorated with red-brown and fuscous Fore wing irrorated chiefly on the veins, the costal area white irrorated with brown, widest at middle and tapering to base and apex; a black streak at lower angle of cell Hind wing yellowish grey and semilyaline, the cilia whitish

Hab. Upper Assam, Tenasserim. Exp 21 millim.

SEOT II Palpi of male with the 2nd joint cylindrical and reaching vertex of head, the 3rd fringed with long curved scales forming a hollow, maxillary palpi minute and filiform, antenne with the shaft excised near base behind, then thickened by a ridge of scales behind and with a tooth of scales in front; mid tibis immensely dilated with a fold containing a tuft of long hair, the extremity with tuft on outer side, fore wing very narrow, with a large fold at base of costa on upperside and a fan of scales covering the end of the cell

4419. Spatulipalpia flabellifera, n. sp

Red-brown irrorated with ochreous and fuscous, head variegated with white, the hollow on vertex black, the fringe on 3rd joint of



Fig. 59 —Spatulipalpia flabellifera, &

palpi edged with black and the hollow black; anal tuft ochreous white. Fore wing with the ochreous scales forming pale streaks; a prominent black streak in end of cell and slight streaks in the interspaces below and beyond end of cell, traces of a pale submarginal line, a marginal series of black specks. Hind wing very pale fuscous and semilyaline

Hab. Coylon (Green) Exp. 20 millim. Type in B M.

SECT. III. Palpi of male with the 2nd joint fringed with hair in front, the 2nd and 3rd joints not fringed with curved scales, frons with a tuft of rough hair, vertex of head not hollowed out, antennæ with the basal joint not dilated, the shaft thickened and flattened but without ridge of scales.

4420. Spatulipalpia pallicostalis, Will Cat xxvii, p 63, Rag Mon. Phyc p 18, pl xli, fig 1, C & S no 4557

Red-brown irrorated with white; head whitish Fore wing with the costal area white irrorated with brown and broadening from base to apex, a white spot in cell and discocellular spot; an oblique postmedial series of white specks, cilia whitish Hind wing pale semihyaline, with marginal fuscous line.

Hab Combatore, Ceylon. Exp 22 millim

4421 Spatulipalpia erythrina, n sp.

6 Head and thorax dark red-brown; abdomen pale rufous. Fore wing purplish red-brown, a sinuous medial line with fuscous mark on its inner edge below costa, the inner area beyond it paler, a dark postmedial line slightly bent outwards at vein 5 Hind wing pale tinged with ferruginous red, especially on inner area, the veins and cilia ferruginous red

Hab. Calcutta (Atkinson) Eap. 14 millim. Type in B. M.

Genus CEROPREPES.

Ceroprepes, Zell Stettin. ent. Zeit. 1867, p 401.

Type, C patriciella, Zell. Range Amur, Himalayas

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed and acuminate; maxillary palpi filiform, from rounded, antennæ of male with uniseriate branches, the basal joint long and much thickened at extremity, the base of shaft thickened by a ridge of scales on upperside. Fore wing with a ridge of raised scales before the antemedial line, vein 3 from close to angle of cell, 4, 5 from angle, 10 approximated to 8, 9. Hind wing with vein 3 from near angle of cell, 4, 5 from angle, 6, 7 shortly stalked, 7 anastomosing with 8, the cell short

4422 Ceroprepes patriciella, Zell Stettin ent Zeit 1867, p 401, pl 11, figs 4 a, b, Rag Mon Phyc p 9, pl 1v, fig 2, C & S no 4554



d. Head, thorax, and abdomen reddish ochreous, with slight fuscous markings. Fore wing purplish rufous suffused with fuscous, the costa rufous; an indistruct pale sinuous

Fig 60—Ciroprepes patriciella, of the an indistruct pale sinuous medial line, with dive band inside it, white patch on costa, and tufts

of raised black scales from cell to inner margin, a slight dark spot in cell and discocellular lunule, an indistinct minutely waved post-medial line angled inwards on vein 7, excurved between veins 6 and 3, and terminating in a white spot. Hind wing uniform pale fuscous and semilyaline

2 with less prominent olive band inside the medial line of fore

wing

Hab Sikhim Exp., of 24, 2 26 millim.

- 4423. Ceroprepes pulvillella, Zell Stettin ent. Zeit 1867, p 394, pl n, fig 3, Rag Mon. Phyc p. 11, pl 1v, fig 1, C. & S. no 4555.
- o. Head, thorax, and abdomen rufous brown, the thorax suffused with fuscous Fore wing rufous brown, the basal area to near middle purplish black, with brown streak below median nervure, large antemedial tufts of laised black scales from cell to inner margin, traces of a sinuous medial line with olive band inside it, and of a minutely dentate and curved submarginal line, traces of a discocellular lunule and of slight streaks on the veins beyond cell, a marginal series of dark specks. Hind wing uniform pale semilyaline brown.
- Q with the suffusion on thorax and basal area of fore wing pale fuscous; a pale fascia on inner area of fore wing beyond the postmedial line, the patches of raised scales olive.

Hab Sikhim. Evp. 28-30 millim.

- 4424. Ceroprepes ophthalmicella, Chr. Bull Soc. Nat. Mosc lvi, 1, p 49, Rag Mon Phyc p 10, pl iv, fig 3
- Q Brown irrorated with grey Fore wing with conical darkedged antemedial brown stigms from subcostals to inner margin, its apex bent inwards and traversed by a line, and with a ridge of raised black scales on its inner edge, an indistinct discocellular lumile, a minutely dentate postmedial line angled at vein 4, a marginal series of black specks. Hind wing pale brown and semihyaline.

Hab Amur, Murree. Eup 23-28 millim.

Genus CRYPTOBLABES.

Oryptoblabes, Zell Ists, 1848, p 644

Type, O bistriga, Haw, from Europe Range Palæarctic, Oriental, and Australian regions.

Palpi uptuined, the 2nd joint reaching vertex of head, the 3id well developed, maxillary palpi filiform, frons rounded, antennæ with the basal joint rather large, a slight tooth of scales on base of shaft. Fore wing with vein 3 from before angle of cell, 4, 5 from angle or shortly stalked, 10, 11 free. Hind wing with the cell nearly half the length of wing, vein 3 from near angle; 4, 5 from angle, 6, 7 stalked, 7 strongly anastomosing with 8

SECT. I. Palpi of male not dilated with scales towards extremity, mid tibiæ not dilated

4425. Cryptoblabes augustipennella, Rag Nouv Gen p 6, id Mon Phyc p 16, pl v, fig 3, C & S no 4556

Grey thickly irrorated with fuscous Fore wing narrow, with a few crimson scales on base of costal and inner margins, an oblique pale antemedial line with fuscous band on its outer edge, dark specks at the two angles of cell, an oblique pale minutely dentate submarginal line, angled inwards on vein 5 and its inner edge defined by fuscous; a marginal series of dark specks Hind wing pale and semilyaline, the marginal area tinged with fuscous. Hab. Dharmsála, Ceylon. Eap. 20 millim.

4426 Cryptoblabes bipunctalis, n sp

d Pale grey-brown with slight purplish tinge, palpi yellow. Fore wing with the antemedial line represented by fuscous specks in the cell and on vein 1, two very prominent black discocellular spots, a marginal series of black specks. Hind wing semihyaline, the veins and margin brown

Hab. Bhután (Dudgeon). Exp. 18 millim Type in B. M.

4427. Cryptoblabes proleucella, n sp

Q. Grey-brown, palpi blackish towards extremity. Fore wing with the costal area whitish; two prominent dark discocellular spots, an oblique dark submarginal line outwardly defined by grey and very slightly bent outwards at vein 5, a marginal series of black specks. Hind wing paler.

Hab Ceylon (Green) Exp. 20-22 millim Type in B. M.

SECT. II Palpi of male broadly dilated with scales at extremity, mid tibiæ dilated, with a fold containing a tuft of long hair.

4428. Cryptoblabes dissolutella, Snell Midd-Sum, Lep p 81 Rag Mon Phyc p 19, pl 1v, fig 5

d. Head vinous red, the scales at end of palpi purplish, thorax

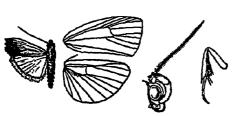


Fig 61 — Cryptoblabes dissolutella, d +

and abdomen yellowish brown Fore wing pale yellowish brown, the costal half suffused with silvery grey and irrorated with pink scales, a few grey scales representing a submarginal line, a marginal dark line; the cha pinkish, with a grey

hne through them Hind wing hyaline, the veins and a marginal line brown

Hab Nágas, Celebes. Eap. 24 millim

Genus THIALLELA.

Thiallela, Wik Cat xxvii, p 120 (1863) Leuconia, Rag Nouv Gen p 7 (1888).

Type, T. signifera, Wlk. Range Assam, Borneo.

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed and acuminate; maxillary palpi filiform, antennæ of male cliated, hind tibiæ with tufts of hair from base and at extremity. Fore wing with veins 4, 5 well separated, 10 free; no antemedial ridge of scales. Hind wing with vein 3 from near angle of cell, 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8

4429. Thiallela signifera, Wlk. Cat. xxvii, p. 120 Leucoma palidobasella, Rag Nouv Gen p 7, id Mon Phyc p 1, pl xiii, ng 1

Head, thorax, and abdomen brown suffused with grey, antennæ

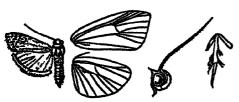


Fig 62 — Thiallola signifera, & }

of male black Fore wing yellow-brown, the basal area suffused with grey and irrorated with a few black scales, a sinuous black medial line, the area on its inner side and beyond it chiefly yellow-brown, with agrey

patch in end of cell, and another beyond the cell extending to the costa and apex, a black discocellular speck and blackish patch beyond lower angle of cell, a submarginal black line excurved between veins 6 and 2; a marginal black line Hind wing pale fuscous brown; the cilia grey, with a fuscous line through them.

Hab. Nágas; Borneo. Exp 24 millim

Genus TEPHRIS

Tephris, Rag Mon Phyc p. 446 (1893). Caina, Rag Mon Phyc p 463

Type, T. cyruella, Ersch., from Central Asia.

Range. Transcaucasus; Persia, Central Asia, W. India;
Burma.

Palpi obliquely upturned, the 2nd joint hollowed out in male to contain the brush-like maxillary palpi, the 3rd joint short and porrect, from with a conical tuft, antenna of male with a slight sinus at base containing a large ridge of scales, tibiae thickly scaled. Fore wing long and narrow; vein 3 from near angle of cell; 4, 5 approximated for a short distance; 10 free. Hind wing with the cell short, vein 2 from near angle; 3, 4, 5 stalked; 6, 7 stalked.

SECT I. (Carna) Antennæ of male thickened and laminate; hind wing with vein 7 anastomosing with 8

4430. Tephris manitella, Rag Nonv Gen p 25, id Mon Phyc. p. 464, pl. xlvn, fig 7, C & S no 4599
Caina micrella, Rag Mon Phyc. p 467, pl vi, fig 25
Caina deletella, Rag Mon Phyc p 467, pl xxvi, fig 6
Caina cimferella, Rag Mon Phyc p 467, pl xvii, fig 12.

Head, thorax, and abdomen greyish white Fore wing greyish



Fig 63 — Tephris inanitella, 3

white irrorated with fuscous, the inner area usually
with very slight ochreous
tinge, more or less developed medial black specks
on median nervure and
vein 1, two discocellular
specks, and a marginal series
of specks Hind wing

semilyaline white, with pale brown marginal line. Underside of fore wing in male with a black streak below basal half of costa and another below vein 12

Hab. Fao, Persian Gulf, Punjab, Sind, Bombay; Poons Exp. 22 millim

SECT II (Tephris). Antennæ of male ciliated, hind wing with vein 8 free

*4431. Tephris connexella, Rag Mon Phyc p 449, pl xvii, fig 19

Q. Head and thorax grey and black, abdomen brown suffused with black. Fore wing grey, irregularly irrorated with black, the basal area darkest, an oblique black-edged pale antemedial line with a black-irrorated whitish triangular patch beyond it, narrow at costa, broad at inner margin, a discocellular black lumile; a pale black-edged sinuous submarginal line, with an oblique line from it to lower angle of cell, a marginal line. Hind wing pale semihyaline white tinged with brown, two fine marginal lines.

Hab. Hyderabad, Sind Exp. 21 millim.

*4432 Tephris perlucidella, Rag Mon Phyc p. 450, pl. xvu, fig. 18.

Q. Head and thorax grey irrorated with black, abdomen browner. Fore wing grey strongly irrorated with black, especially beyond the antemedial line, which is whitish, indistinct, very irregular, not reaching the costa, and broken by a waved black line formed of raised scales, a submarginal minutely waved pale line slightly defined by fuscous; a marginal series of specks, cilia grey, with three fuscous lines. Hind wing semihyaline iridescent white, with two marginal brown lines.

Hab. Hyderabad, Sind. Exp. 23 millim.

- *4433. Tephris ephippella, Rag Bull Soc Ent Fr. 1890, p coxin, ad Mon Phyc p 450, pl vi, fig 17
- 6. Head and thorax ochreous, abdomen irrorated with black. Fore wing steel-grey, the basal area suffused with black, the veins paler, the inner area darker, a pale antemedial line, oblique towards costa, angled on vein 1, where there is a reddish-brown patch, a pale postmedial oblique line defined by fuscous, toothed at vein 5 and with a black patch on costa beyond it, an irregular black line on median nervure and two black discocellular specks, a marginal series of specks. Hind wing semihyaline indescent white, the costa blackish; a blackish marginal line and line through the cilia. Underside of fore wing with a streak of black scales below base of costa

Hab Shan States Evp. 24 millim

Genus ETIELLA.

Etiella, Zell Isis, 1846, p 733
Mella, Will Cat xix, p 1017 (1859).
Assara, Will Cat xxvii, p 79 (1863)
Modiana, Will Cat xxvii, p 82
Alata, Will Cat xxvii, p 108
Arucha, Will Cat xxvii, p 201

Type, E zinckenella, Treit
Range Universally distributed.

Palpi porrect, thickly scaled, and extending about twice the length of head, the 2nd joint in male hollowed out and containing the brush-like maxillary palpi, from with a conical prominence, antenna of male with a sinus at base containing a thick ridge of large scales enclosing a hollow. Fore wing long and narrow, veins 2, 3, 4, 5 from close to angle of cell, but all well separated at origin; 10, 11 free Hind wing with vein 2 from near angle of cell, 3 from angle; 6, 7 stalked, 7 anastomosing with 8

SECT. I. Antennæ of male chated, the sinus and vesicular tuft of moderate size

4434 Etiella zinckenella, Treitschke, Schmett Eur 1x, 1, p 201; Rag

Mon Phyc p 572, C & S no 4601

Phycis etiella, Treitschke, Schmett Eur x, 3, pp 174, 276

Chilo majorellus, Costa, Faun Nap no 19, pl 8, fig 1, p 3

Chilo colonellus, Costa, Faun Nap no 15, pl 8, fig. 2, p 7

Mella dymnusalis, Wth Cat xix, p 1018

Rhamphodes heraldella, Guen Maill Faun Isle de Réunion, 11, G, p 72

Assara albicostalis, Wth Cat xxvii, p 108

Modians scitivittalis, Wth Cat xxvii, p 88

Alata anticalis, Wth Cat xxvii, p 202

Alata hastifeiella, Wth. Cat xxxvi, p 1725

Crambus sabulinus, Butl A M N H (5) 1v, p 455

Pempelia spartiella, Rond Bull Soc Ent. Ital 1876, p 19, pl i, figs 1-15
Etiella madagascanensis, Saalm Ber Sench Ges 1879-80, p 307

Etiella decipiens, Staud Berl ent Zeit 1870, p 195

Head, thorax, and abdomen pale rufous or purplish brown. Fore wing with a white costal fascia, with a grey-brown streak on costa from before middle to near apex; the rest of the wing grey-brown usually suffused with rufous, especially at base and below the costal fascia, an antemedial yellow-brown band with a ridge of raised red scales on its inner edge and a greyish patch before it; traces of a minutely dentate submarginal line and marginal series of specks. Hind wing semihyaline; the veins, apical area, a marginal line, and a line through the cilia brown.

Larva apple-green, with a broad red-brown dorsal band, head yellow, with a brown line behind it, prothorax with two pairs of depressed black spots and a lateral pair with reddish patches behind them, the other somites with black specks, the dorsal specks on white patches and with pale hairs rising from them. It lives in slender silken tubes in the pods of Colutea, Phaseolus, etc., and in India is destructive to the Bombay Hemp, Crotolaria juncea.

Hab. Universally distributed. Exp. 18-30 millim.

SECT II Antennæ of male with uniseriate branches for twothirds length, the sinus and vesicular tuft very large.

4435. Etiella venustella, n sp

3. Head, thorax, and abdomen ochreous suffused with fuscous. Fore wing slate-grey, with a large olive-yellow patch in, below, and beyond end of cell, crossed by a slightly sinuous pale medial line with a prominent black spot inside it below the cell, a slight ridge of raised scales at origin of vein 2; the grey area bounded

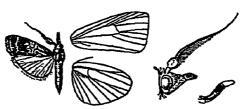


Fig 64 —Etiella venustella, d

by a minutely dentate whitish submarginal line, the outer area rufous, with a submarginal series of black marks largest towards apex and with a pale line on their outer edge; cilia fuscous, with a grey line at base. Hind wing pale semilyaline fuscous brown.

Hab. Bhután (Dudgeon); Nágas (Doherty). Exp. 24 millim. Type in coll. Elwes.

110 PYRALIDE.

Subfamily EPIPASCHIINÆ.

Proboscis present, palpi almost always upturned, and in males often with the 2nd joint hollowed out to receive the brush-like maxillary palpi, which are sometimes bilobed, antennæ of male usually with a more or less developed thickly-scaled flagellate process from basal joint extending backwards over the thorax. Fore wing with tufts of raised scales below the cell and on discocellulars, veins 7, 8, 9 stalked Hind wing with the median nervure non-pectanate, vein 8 usually free.

The larvæ of several species live in colonies in webs and form

social cocoons.

Key to the Genera.

with 8 a. Both wings with veins 4, 5 approximated for a short distance b Both wings with veins 4, 5 stalked l Parorthaga, p 110 B. Hind wing with vein 8 free Fore and hind wings with veins 4, 5
for a short distance 2 Lepidogma, p 111 b Both wings with veins 4, 5 stalked 1 Parorthaga, p 110 B. Hind wing with vein 8 free a Fore and hind wings with veins 4, 5
b Both wings with veins 4, 5 stalked 1 Parorthaga, p 110 B. Hind wing with vein 8 free a Fore and hind wings with veins 4, 5
B. Hind wing with vein 8 free a Fore and hind wings with veins 4, 5
a Fore and hind wings with veins 4, 5
approximated for about one-third
length 3. MAGALLA, p 112
b Fore and hind wings with veins 4, 5
radiating from angle of cell
a' Palpi with the 2nd joint reaching
well above vertex of head 6. STERICTA, p 120
b'. Palpi with the 2nd joint hardly
reaching vertex of head
a ² . Fore wing without antemedial
ridge of hair, antennæ of male
non-pectanate
a ³ Tible nearly smoothly scaled . 7 ORTHAGA, p 124
b Tibe fringed with long hair . 5 LOCASTRA, p 118
62. Fore wing with antemedial ridge
of hair, antennæ of male pec-
tanate 4. Comodomus, p. 116.

Genus PARORTHAGA, nov.

Type, P curyptera, Meyr

Range. Japan, Bhután; Ceylon, Sumbawa, Australia.

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed, maxillary palpi filiform; from rounded, antennæ of male fasciculate, tabis slightly hairy. Fore wing with vein 3 approximated for a short distance to 4, 5, which are stalked; 6 from upper angle, 7, 8, 9 stalked, 10, 11 free, male with a glandular swelling on costa beyond middle. 'Hind wing with vein 3 from angle of cell, 4, 5 stalked; 6, 7 from upper angle, 7 anastomosing with 8.

4436. Parorthaga euryptera, Meyr Trans. Ent Soc 1894, p 476

Grey slightly suffused with olive-brown or green; male with

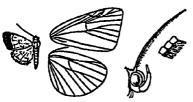


Fig 65—Parorthaga euryptera, o

the anal tuft fuscous. Fore wing slightly irrorated with fuscous and with rather indistinct sinuous medial and postmedial waved lines, the outer area fuscous brown almost to the postmedial line. Hind wing whitish or pale fuscous, with indistinct curved

postmedial line and the outer area suffused with fuscous.

Hab. Japan; Bhután; Ceylon; Sumbawa. Exp. 18 millim.

Genus LEPIDOGMA.

Lepidogma, Meyr Trans Ent Soc. 1890, p 472

Type, L. tamarıcıalıs, Mann., from the Mediterranean subregion. Range Southern Europe; Central Asia; Bhután, Sind.

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd of moderate length, maxillary palpi minute; antennæ of male fasciculate, with a large tuft of scales from apex of basal joint, mid and hind tabiæ with the outer terminal spur short. Forewing narrow, the costa straight, vein 3 from angle of cell, 4 and 5 approximated for one-third length; 7, 8 stalked, 10, 11 free Hind wing with vein 3 from before angle of cell, 4 and 5 approximated for half their length, 6, 7 on a short stalk, 7 anastomosing with 8.

SECT. I. Fore wing with vein 9 coincident with 8.

4437. Lepidogma obatralis, Christ Hor. Ent Ross 1876, xii, p 264, pl 7, fig 36.

Hypota vafera, Swinh P. Z S 1884, p 523, pl 48, fig 8, C & S no 4521.

Grey, suffused with brown and irrorated with black. Fore wing



Fig. 66 —Lepidogma obatralis, o

with black basal spot on costa and speck in base of cell, an antemedial white band slightly angled on median nervure; traces of a diffused dark oblique medial band from lower angle of cell to inner margin; a speck on discocellulars, a white postmedial

line with dark inner edge and much bent outwards between veins 2 and 5. Hind wing white; the apical area fuscous, a white

postmedial line with dark inner edge bent outwards at vein 5 and obsolete below vein 2, calia of both wings chequered white and black

Hab Krasnowvodsk, Siberia, Punjab, Karáchi Exp, & 18, 9 24 millim

SECT II Fore wing with vein 9 given off from 8.

4438 Lepidogma rufescens, n sp

Q Head, thorax and abdomen pale rufous Fore wing pale rufous irrorated with black scales, the discocellular tuft black; a broad diffused grey band beyond middle traversed by a minutely waved dark line; the outer area redder, with a marginal series of black specks Hind wing pale rufous

Hab Bhután (Dudgeon). Exp 20 millim Type in B M.

Genus MACALLA

Macalla, Wik xvi, p 155 (1858)
Lamida, Wik Cat xvi, p 252
Allata, Wik Cat xxvii, p 110 (1863)
Epipaschia, Clem Proc Nat Sci Phil 1860, p 14
Calimpaxa, Wik Cat xxxii, p 1218 (1865)
Teliphasa, Moore, Lep Ath p 200 (1888)
Parasarama, Moore, A M N H (6) vi, p 474 (1890)
Orthotrichophora, Warr A M N H (6) vi, p 429 (1891)

Type, M thyrsisalis, Wlk, from Honduras.

Range Nearctic and Neotropical regions, Japan; Oriental and

Australian regions

Palpi upturned, in female the 2nd joint long and reaching above vertex of head, the 3rd long, tibize slightly hairy. Fore wing with the apex rectangular; veins 4, 5 closely approximated for one-third of their length; 7, 8, 9 stalked, 10, 11 free. Hind wing with vein 3 from angle of cell, 4, 5 closely approximated for one-third length, 6, 7 from angle of cell or shortly stalked.

The typical species belongs to Sect. I, but has long processes

from basal joints of antennæ.

- SECT. I (Lamida) Male with the 2nd joint of palpi short, the 3rd immensely dilated and curved over vertex of head, with a hollow containing the brush-like maxillary palpi, antennæ minutely chiated, with a tuft of hair from the head behind them.
- 4439. Macalla nubilalis, Hmpsn III Het 1x, p 157, pl 172, fig 9
- Q Head, thorax, and abdomen pale rufous grey with a few black scales, patagia olive at base. Fore wing olive-green and grey; the costal area fuscous to middle; an oblique black antemedial line with a raised tuft of long scales on it; fan-shaped

tufts of long scales in end of cell and on discocellulars, a prominent diffused oblique black line across apex from costa to outer margin, with a dentate postmedial line excurved beyond cell arising from it; outer area suffused with brownish Hind wing semihvaline, the apical area strongly suffused with fuscous, the inner area slightly suffused, cilia whitish at tips Underside pale; the outer area and especially the apex of each wing fuscous.

Hab. S. India; Ceylon Exp. 32 millim.

- 4440. Macalla moncusalis, Wik Cat xvi, p 252, C & S no 2942 Allata penicillata, Wik Cat xvvii, p 111, C & S no 4640 Orthaga obscura, Moore, Lep Atk p 201, C & S no 4490 Pseudolocastra inimica, Snell Trans Ent Soc 1890, p 566 (nec Butl)
- d. Dark fuscous Fore wing with traces of dentate antemedial line angled in the cell, the fan of scales in end of cell grey; a black discocellular speck; an obscure dentate postmedial line highly angled at vein 4 and with diffused grey on its outer edge. Underside of hind wing with traces of discocellular lunule and minutely dentate postmedial line excurved from vein 6 to 2.

Q paler and more olive-green Hab Sikhim, Bhután, Nágas, Manipur. Exp, & 26, 2 26-32 millim.

4441 Macalla syrichtusalis, Will Cat xvi, p 165

3. Differs from moncusalis in the fore wing having a fringe of very long hair in cell and a fringe below costa from beyond middle to apex, darker olive-green with the markings hardly traceable.

Hind wing dark fuscous with slight purplish reflections.

2 with the fore wing variegated with ochreous as far as the postmedial line, the outer area purplish, the lines more prominent, a dark spot in cell and marginal series of spots Hind wing purplish fuscous, with traces of sinuous line from beyond lower angle of cell to anal angle.

Hab. Sikhim, Nágas; Borneo. Exp 30 millim

4442 Macalla albifusa, n sp

J. Head, thorax, and abdomen grey, suffused with olive and fuscous Fore wing with the basal area olive-yellow and grey, with a few black scales on its outer edge; the medial area white irrorated with olive-yellow, with slight tufts of scales below cell and on discocellulars, a black discocellular spot; a postmedial irregular black band excurved between veins 6 and 2 and with a white spot beyond it on costa; the outer area olive suffused with black, a series of black specks on margin towards apex, cilia chequered with black. Hind wing white, with broad marginal fuscous band becoming obsolescent towards anal angle Underside white; each wing with black cell-spot and diffused postmedial line with the area beyond it fuscous

YOL. IV.

2 with the postmedial line of fore wing dentate; the outerarea irrorated with white scales. Hind wing with curved dark postmedial line bounding the pale area

Hab. Sikhim (Dudgeon); Nagas (Doherty). Eurp., & 34, 2 36

millim. Type in B. M.

SECT. II. (Telephasa) Male with the maxillary palpi filiform; the 2nd joint of palpi short, the 3rd upturned, straight, reaching far above vertex of head and thickly clothed in front with downwardly directed hair; antennæ fasciculate, with a short hairy process from basal joint.

4443. Macalla derogatella, Wik Cat. xxvii, p 30
Teliphasa orbiculifer, Moore, Lep Ath p 201, C & S no 4481.
Teliphasa nubilosa, Moore, Lep Ath p 201, C & S no 4480

Ohve-green, thickly irrorated and suffused with black. Fore wing with a sinuous antemedial line, and indistinct minutely dentate postmedial line excurved between veius 5 and 2; the area-



Fig 67 — Macalla derogatella, o

between the two lines more olive, with a black spot in the cell and a lunule on discocellulars, outer areafuscous, with a slight rufous tinge; cilia rutous and black Hind wing ochreous, more or less suffused with fuscous, traces of a curved

postmedial line Underside of each wing with prominent black cell-spot and postmedial line angled beyond cell, the basal area pale, on fore wing suffused with fuscous in the cell and between veins 2 and 5, outer area fuscous

The form nubilosa is much more suffused with fuscous than in the typical form and the hind wing is wholly suffused with fuscous except the costal area. One specimen has some white on thorax and a large patch in and below middle of cell of fore wing, and spot on discocellulars

Another specimen is fuscous grey without any green tinge.

Hab. Dalhousie; Simla; Murree, Nágas; Sikhim; Borneo.

Exp. 36 millim.

SECT. III Palpi of male with a fringe of hair on 1st joint above, so that the palpi are thrown forward, the 2nd joint long, with fringe of down curved hair longest towards extremity; 3rd joint minute and porrect; basal joint of antennæ long, without process, the shaft arising at an angle.

4444 Macalla scoporhyncha, n sp.

d Olive-green irrorated with black. Fore wing with black and white specks on costa, ill-defined black ante- and postmedial.

lines, the former angled outwards below cell, the latter inwards and oblique; a black discocellular spot Hind wing with indistinct dark curved postmedial line, both wings with marginal series of black specks.

Hab. Sikhim (Pilcher). Evp. 24 millim. Type in B. M.

- SECT. IV. Male with the palpi similar to the female; antennæ somewhat thickened and minutely ciliated.
- A. (Epipaschia) Antennæ of male with a very long flagellate process from the bosal joint recurved over thorax and fringed with long hair and scales below.
- 4445 Macalla validalis, Wil. Cat xxxiv, p 1218
 Scopocera minor, Moore, Lep Atl. p 203, C & S no 4483
 Peucela fumosalis, Warr A M N H (6) xvii, p 461

Golden olive, slightly irrorated with black scales. Fore wing with black marks on costa; an interrupted antemedial black line outwardly oblique from costa to vein 1. a prominent black spot at end of cell, a minutely dentate postmedial line excurved from vein 6 to 2, a marginal series of black specks, the cilia fuscous. Hind wing fuscous with a slight rutous tinge, and with traces of a curved postmedial line; a dark line through the cilia. Underside with minutely denticulate curved postmedial line.

One specimen has a large white patch on medial area of fore wing, and white patch on costa beyond the postmedial line

Hab. Sikhim; Khásis, Nágas, Borneo Exp 22 millim.

B. (Parasarama) Antennæ of male with no process from basal joint.

4446 Macalla dimidialis, Snell Trans Ent Soc 1890, p 568

Pale grey; palpi fuscous. Fore wing with two red-brown spotson basal half of costa; the outer area red-brown, commencing from
middle of costa obliquely to lower angle of cell, an indistinct
postmedial line outlined with grey most strongly at costa and
inner margin, bent outwards and minutely dentate between
veins 6 and 2, then bent inwards and sinuous. Hind wing grey
with a fuscous tinge, with faint traces of minutely dentate curved
postmedial line.

Hab. Sikhim. Exp. 22 millim

4447. Macalla parvula, n sp.

J. Head, thorax, and abdomen grey and fuscous, metathorax and first abdominal segment with paired dark tufts; anal tuft ochreous. Fore wing with the basal area olive-brown, bounded by a sinuous black line with white suffusion beyond it, the outer area fuscous brown; a black discocellular speck, the postmedial line blackish, oblique from costa to vein 4, then retracted to lower angle of cell and diffused to inner margin. Hind wing whitish,

with slight fuscous suffusion on apical and outer areas and au obscure diffused patch on vein 2.

Hab Bhu, Cutch (Nurse) Exp 20 millim Type in B. M.

4448 Macalla exrufescens, n. sp

d. Head, thorax, and abdomen grey with a reddish tinge and irrorated with black. Fore wing with the basal area pale reddish grey; a sinuous black antemedial line; the medial area grey thickly irrorated with black, tufts of black scales in end of cell and on discocellulars; a waved postmedial dark line incurved below vein 4, the area beyond it rufous; the margin and cilia with series of dark spots. Hind wing with the basal costal area white, the outer and inner areas fuscous and rufous, a rufous and fuscous limite on vein 2, and series of dark spots on margin and cilia.

Hab Sikhim. Exp. 38 millim. Type in B. M.

4449. Macalla margarita, Butl Ill Het in, p 66, pl 57, fig 4
Locastra lativitta, Moore, Lep Atk. p 199, pl 7, fig 1, C & S.
no. 4476
Parasarama conjuncta, Warr A M N H (6) xvii, p 454

Parasarama rufitmetalis, Warr A M N H (6) xvii, p 454
Parasarama rufitmetalis, Warr A M N H (6) xvii, p 455

Olive-green and pure white irrorated with a few black scales. Fore wing with the basal area olive-green widening to inner! margin, a white spot on base of costa, the medial area white and in form of an irregular Y from having an olive blotch at middle of costa; an obscure minutely dentate postmedial line angled at vein 4, then incurved and again bent outwards near inner margin; the outer area olive, with a more or less developed submarginal series of white specks. Hind wing white, with indistinct minutely dentate postmedial line; a fuscous marginal band, broad at apex and narrowing to anal angle; citia chequered with fuscous.

Hab. Japan, Sikhim; Khásis, Nilgiris, Borneo. Exp. 34 millim.

4450 Macalla cuproviridalis, Moore, P Z S 1867, p 87, C & S. no. 4475.

Head and thorax olive-green, abdomen white and black. Fore wing with the basal area olive-green with a few white scales on it, and bounded by the antemedial black line which is bent outwards below the cell; the medial area white irrorated with olive-green and with the costa green, a prominent black spot in the cell and lumile at end of it, a dentate diffused postmedial line, with the area beyond it olive-green with diffused black patches on it; a marginal series of white specks. Hind wing pure white, with a broad fuscous marginal band narrowing to anal angle.

Hab Sikhim. Exp 42 millim.

Genus CŒNODOMUS.

Coenodomus, Wism Tr Lum Soc 1889, p 49. Alippa, Aurwillius, Ent. Tids 1894, p 176 Type, O hockingu, Wism Range. Punjab; Bengal, Himalayas, Nilgiris; Java. Palpi upturned, thickly scaled, and hardly reaching vertex of head; the 2nd joint in male hollowed out to receive the brush-like maxillary palpi; antennæ of male bipectinated to two-thirds length with long branches decreasing distally, and with a process fringed with hair from basal joint, tibiæ and tarsal joints fringed with hair. Fore wing with the apex rounded, veins 3, 4, 5 from close to angle of cell, 6 from upper angle; 7, 8, 9 stalked; 10, 11 free, a large antemedial ridge of long hair from below the cell to inner margin and a tuft at upper angle Hind wing with veins 3, 4, 5 from close to angle of cell, 6, 7 from upper angle, 8 free, tufts of long hair near lower angle of cell

SECT. I Antennæ of male with the process from basal joint short

4451 Cœnodomus hockingii, Wlsm Trans Linn Soc, Zool v, 1889, p 49, pl 5. C δ S no 4504 Alippa anomala, Aurivillius, Ent Tids 1894, p 176

Head, thorax, and abdomen clothed with grey, black, and rufous



Fig 68 - Canodomus hockingi, of

hair Fore wing grey irrorated with fuscous brown, which is the prevailing colour on the costal and basal areas. the tufts of long hair rufous with black tips, a slightly curved antemedial line; a highly sinuous pale rufous postmedial band edged by

black lines. Hind wing grey thickly irrorated with fuscous brown, the tufts near lower angle of cell rufous tipped with black, a pale rufous sinuous postmedial band edged by waved black lines.

Larva Yellowish white, head dark brown, 1st somite with a large chitinous dorsal plate marked with about twelve pale brown spots and two brown lateral stripes, 2nd and 3rd somites with five or six brown spots, the 4th, 5th, and 6th each with two pairs of spots, 7th to 11 somites fuscous brown. Food-plant, Eugenia nambolana, Lam The larvæ are gregarious and live in strong tubes composed of two layers of silk with excrement between them, from three to fifteen in each colony, the tubes are open at each end and the larvæ emerge as far as the 6th somite from either end to feed, the colony is attached to its food-plant by silken threads, but is able to move about from one part of the plant to another

Hab. Simla, Kungra, Sikhim; Čalcutta, Vizigapatam; Java Eap, 35-40, 9 36-50 millim

- 4452. Conodomus rotundinidus, Hmpsn Ill Het viii, p 127, pl 154, fig 16
- 9. Differs from hockings in being much greyer and less irrorated with fuscous Fore wing with the antemedial line

angled below the cell; both wings with a prominent lumulate rufous postmedial line, incurved below vein 3, before the postmedial band; a crenulate dark marginal line.

The larvæ feed on a tree of the Laurel tribe and turn to pupæ in a round ball, of about three inches diameter, made of the leaves and web spun together, about six larves to each colony.

Hab Nilgiri plateau. Exp. 44 millim.

SECT. II Antennæ of male with the process from basal joint reaching to end of metathorax.

4453. Conodomus dudgeom, n sp

d. Head, thorax, and abdomen ochreous and fuscous, wings leaden coloured Fore wing with ill-defined sinuous black-edged white ante- and postmedial lines, the latter with some olive beyond it; the tufts of hair on basal area, discocellulars, and beyond the postmedial line blackish with a few white hairs. Hind wing with sinuous whitish postmedial line with olive patch beyond it at anal angle; tufts of black and white hair near base, end of cell, and beyond postmedial line.

Hab Bhutan (Dudgeon). Exp 32 millim. Type in B. M.

Genus LOCASTRA.

Locastra, Wik. Cat. xv1, p 158 (1858) Taurica, Wil. Cat xxxiv, p. 1268 (1865).

Type, L. crassipennis, Wlk.

Range Brazil, China, N.E India, Ceylon, Burma; Borneo. Palpi upturned and reaching vertex of head, the 2nd joint in male fringed with long hair at base, 2nd and 3rd curved forward, in the female the 2nd joint is tufted with hair at extremity, the 3rd minute and upturned, maxillary palpi dilated with scales; antenne of male minutely serrate and fasciculate, tibie and tarsi fringed with very long hair. Fore wing with vein 1a strong; 3, 4, 5 from angle of cell, 6 from below upper angle; 7, 8, 9 stalked, tufts of raised scales below middle of cell and on discocellulars Hind wing with vein 3 from near angle of cell; 4, 5 from angle, 6, 7 from upper angle, 7 often connected with 8 by a bar, or in one specimen vein 8 is connected with the end of the cell by an additional vein showing the bar to be the remains of one of the lost subcostals, male with the inner area clothed with long hair on upper and under sides.

- SECT. I Antennæ of male with a process from basal joint; fore wing with a glandular costal lobe at two-thirds from base, with the subcostal nervules bent round it.
- A. (Locastra). Male with a very large recurved triangular process from basul joint of antenna clothed with long rough scales, hind tibiæ extremely thickly clothed with rough curved scales to near extremity

4454. Locastra crassipennis, Wlk Cat xi, p 558; C. & S. no. 1926. Locastra maimonalis, Wlk Cat. xvi, p 159

Head, thorax, abdomen, and fore wing clothed with olive-yellow, rufous, and fuscous scales, the last with rufous basal and discal



Fig 69 -Locastra crassipennis, d. 1

patches; dentate black ante- and postmedial lines, the latter highly excurved round end of cell, a black spot in end of cell; the outer area olive-yellow, with a marginal series of black striæ, the cilia rufous and fuscous Hind wing of male pale with slight rufous tinge; of female fuscous brown.

Hab. Sylhet, Borneo Exp, & 40, \, 50 millim.

- B. (Taurica). Male with the process on basal joint of antennæ much smaller, mid tibiæ clothed with long hair, but without the thick curved scales
- 4455 Locastra muscosalis, Wil. Cat xxxiv, p 1269.

 Taurica sikkima, Moore, Lep. Atk. p 202, C & S. no. 4482

 Locastra cristalis, Hmpsn Ill. Het ix, p 157, pl 172, fig. 24

Differs from crassipennis in being rufous and fuscous, with a slight green tinge but no olive-yellow shades. Fore wing with the antemedial line straighter, no spot in end of cell; the postmedial line more bent inwards at vein 2. Hind wing fuscous in both sexes and with traces of a pale dentate postmedial line.

Hab. N China; Sikhim, Nágas, Ceylon; Rangoon Exp., & 38,

Q 46 millim

- SECT. II Male with no process from basal joint of antennæ or glandular lobe on costa of fore wing, a patch of thick brown scales on underside below cell; hind wing very broad, with a patch of thick brown scales in cell above; abdomen with the claspers very large and large paired genital tufts.
- 4456. Locastra pachylepidalis, n sp
- d Head, thorax, and abdomen olive-green irrorated with white; patagia fringed with rufous hair, genital tufts rufous. Fore wing dark green, the medial area irrorated with white, some white scales at base, the outer area irrorated with black; two dark spots

in cell. Hind wing with the costal half dark purple-brown; a white streak below median nervure diffused beyond lower angle of cell, the inner area rufous.

Hab. Bhután, 2500 feet (Dudgeon). Emp 32 millim

Туре

in B. M.

Genus STERICTA.

Stericts, Led. Wien ent Mon. vii, p 340 (1863) Glossina, Guen Delt & Pyr p 124 (1854), præocc Craneophora, Christ. Bull Soc Nat Mosc 1881, lvi (1), p 1 Sarama, Moore, Lep Atk p 208 (1888)
Belenopholis, Buti Ill. Het vii, p 89 (1890) Trichotophyss, Warr. A. M. N. H. (6) xvii, p 457 (1896).

Type, S. divitalis, Guen

Range. Nearctic, Neotropical, Oriental, and Australian regions. Palpi upturned and smoothly scaled, the second joint reaching above vertex of head, the 3rd long, table slightly fringed with hair; hind tibie with a terminal tuft on outer side. Fore wing with the spex rounded; vein 3 from near angle of cell, 4, 5 from angle, 6 from or from above upper angle, 7,8.9 stalked; 10, 11 free. Hind wing with vein 3 from near angle of cell; 4, 5 from angle: 6, 7 on a short stalk.

SECT. I. Antennæ of male with a long flagellate process on 1st joint recurved over the thorax and fringed below with long Palpi of male with the 2nd joint hollowed out to receive the brush-like maxillary palpi.

A Antennæ of male minutely ciliated.

a. (Stericta). Fore wing with slight justs of scales below and beyond cell

4457. Stericta divitalis, Guen. Delt & Pyr p 124, pl. 7, fig 4, C. & S. no 4478.

Locastra phereciusalis, Wik Cat xvi, p 159

Head rufous, thorax green; abdomen suffused with rufous. Fore wing bright rufous irrorated with black, a yellowish-green basal patch with black specks on it and indistinct subbasal line, a black-edged green antemedial line angled above inner margin, the green being diffused outwards through the cell to the blackedged slightly-curved postmedial line and between veins 3 and 4 to the outer margin, two black specks in end of cell; a marginal series of black lumiles. Hind wing reddish brown; cilia of both wings pink Underside of hind wing with the basal half pale, a curved medial line.

Hab. Assam; Ceylon; Borneo. Evp. 35 millim.

4458. Stericta rufescens, n. sp.

d. Pale and dark red-brown; antennal processes black at tips. Fore wing dark red-brown, with pale patches at base of costa and apex; an indistinct sinuous antemedial line: black specks on median nervure, in cell, and on discocellulars, a postmedial black line excurved between veins 6 and 2; a marginal black line. Hind wing with submarginal black spot on vein 2; a pale patch at anal angle.

Hab. Bhután, 2500 feet (Dudgeon) Exp 24 millim. Type in

B. M.

4459 Stericta asopialis, Snell Trans Ent Soc 1890, p 568

d. Head and thorax black, abdomen pale brown, with the extremity black. Fore wing with the basal area black, with large tufts of raised scales, the medial area olive-green, with black discocellular spot and fuscous marks on costa, the outer area fuscous black, with waved inner edge. Hind wing with the inner area tinged with rufous, the costal and apical areas fuscous; a slight dark submarginal mark on vein 2; underside with curved postmedial line.

Q with the black areas tinged with cupreous, especially the outer area of fore wing, which has a postmedial line angled on vein 4 and outlined with olive-green. Hind wing uniform fuscous,

except for the mark on vein 2.

Hab. Sikhim, Bhután Exp., & 20, 2 24 millim.

b. (Craneophora). Fire wing with a ridge of long hair beyond cell and another below the cell, hind wing with ridge beyond cell and on inner area.

4460 Stericta haraldusalis, Wlk Cat xvi, p 160 Craneophora ficki, Christ Bull Soc Nat Mosc 1881, lvi (1), p 2. Scopocera variegata, Moore, Lep Ath p. 203, pl. 7, fig 4, C & S no 4486 Belenopholis striata, Butl. Ill Het vii, p 90, pl 134, fig 3

Head, thorax, and abdomen ochreous irrorated with black; the anal tuft pink and yellow Fore wing with the base and costa



Fig 70 -Stericta haraldusalis, 3 }

to beyond middle ochreous irrorated with black, the tuft at end of cell and the ridges consisting of black and white hair; an obliquely-curved antemedial line; the medial area pink, with an orange band below the cell; a postmedial curved black line with orange band beyond it; the

outer area orange-red; the veins striped with black and white. Hind wing similar, but without the antemedial line, the outer area narrow, with traces of black and white streaks on the veins.

Hab Amur, Japan; Simla; Dharmsála, Kulu; Sikhim; Tenasserim, Borneo. Erp, & 24, Q 30 millim.

B. (Sarama). Antennos of male minutely serrate and fasciculate; palps of female with a tuft of hair at extremity of 2nd joint on inside. Fore wing with two large tufts of scales below the cell and large tuft in and beyond the end, a ridge of scales below vein 2, and small tufts in the interspaces between veins 2 and 5.

4461. Stericta atkinsoni, Moore, Lep. Atk p 204, C. & S no 4487.

Head and thorax yellowish olive, variegated with black and white. Fore wing yellowish olive, with more or less white on basal and postmedial areas; a black patch on basal costal area; two conjoined patches forming a diffused antemedial band; some black suffusion on disk; the tufts black and white; an indistinct minutely dentate curved postmedial line, culia chequered white and black. Hind wing white, with slight fuscous suffusion, which is strongest on apical area; a curved minutely dentate postmedial line; a marginal black line, culia white, with a few black specks. Hab. Sikhim. Exp. 30 millim.

C. (Scopocers). Antenna of male thickened and flattened; fore wing with ridges of long hair beyond the cell below venns 2 and 6, and a shorter ridge above vein 6; hind wing with ridges below vein 6 and between lower angle of cell and anal angle.

4462 Stericta sinuosa, Moore, Lep Ath. p 203, pl 7, fig. 8; C & S. no 4485

Olive-green suffused with golden rufous; abdomen banded with black. Fore wing with the area from base to postmedial line, except the costal area, pale; the tufts below and in cell formed by long hair, the ridges composed of fiery red, black, and white hair, the postmedial line dentate, with white outer edge and excurved between veins 5 and 2. Hind wing with the basal and costal areas pale, the ridges composed of black, white, and fulvous hair; the postmedial line white, dentate, and excurved between veins 2 and 6. Both wings with a marginal series of dark specks. Underside pale, except the outer area of fore wing; both wings with dentate postmedial line.

Hab. Bhutan, Sikhim. Exp., & 20, 2 30 millim.

4463. Stericta pyraliata, Moore, Lep. Atk p. 202, C & S. no. 4484

Ohve-green variegated with rufous and fuscous. Fore wing with the tufts composed of black, white, and rufous scales, the costa fuscous, a pale waved antemedial line with large fuscous patch inside it on inner area; a dark discocellular spot, a pale postmedial line excurved between veins 5 and 2, with a broad band of fuscous suffusion on its inner side and slight fuscous suffusion beyond it, and some cupreous scales on inner area; a marginal series of black strise. Hind wing pale; the outer area suffused

with fuscous; a minutely waved line from vein 5 to near anal angle, a marginal series of fuscous striæ Underside with the fuscous pale-edged postmedial line prominent on each wing, and bent outwards at vein 4.

Hab. Sikhim. Eap. 24 millim.

4464. Stericta aglossalis, Warr A M N H (6) xvii, p 456.

Head and thorax clothed with yellowish-green and black hair, abdomen rufous and black. Fore wing with the basal half yellowish green and black, an ill-defined antemedial line, with dentitions in and below cell; the tuft in cell black and white; the outer area fuscous and black, with a flesh-pink subapical streak and larger fascia on vein 2, a crenulate postmedial line excurved between veins 2 and 5; a few white bairs in the streaks. Hind wing fuscous and black, with some white hairs in the streaks. a dentate postmedial line excurved between veins 2 and 5. Underside grey, with the postmedial dentate line prominent.

Hab. Dalhousie; Khasis. Exp, & 30, 2 34 millim

SECT II. Male with the maxillary palpi filiform, antennæ with fascicles of ciha and no process on basal joint.

A. Fore wing of male with no fovea on underside beyond the cell. 4465. Stericta carneotineta, n. sp.

d. Head, thorax, and abdomen ochreous and white. wing white, the basal half irrorated and suffused with ochreous, which forms two irregular patches in and below end of cell; the medial area less marked with othreous; traces of a waved postmedial ochreous band excurved between veins 5 and 2, and with dark marks beyond it between veins 1 and 6; the outer area ochreous, with a series of marginal specks. Hind wing suffused with flesh-colour, traces of a waved postmedial line; a darker marginal band.

Hab Sikhim (Dudgeon). Exp. 30 millim. Type in B. M.

4466. Stericta plumbifloccalis, n. sp

d. Ochreous white; palpi fuscous at extremity; antennæ fuscous, abdomen with dorsal leaden-coloured bands on the first two segments. Fore wing with the costal area tinged with rufous; some slight leaden streaks on basal inner area; tuftbearing leaden streaks below middle and in and beyond end of cell, a slightly sinuous pale postmedial line inwardly defined by fuscous, and with the area beyond it fuscous Hind wing with sinuous black postmedial line, most strongly marked towards inner margin; two submarginal leaden specks on middle of outer area.

Hab. Tenasserim (Doherty). Exp. 22 millim. Type in coll.

Druce.

- B (Trichotophysa). For e uring of male with a large foven on underside beyond the discocellulars, covered with long hair and with vein 6 bent round it, a fan of scales above
- 4467 Sterreta jucundalis, Wil. Cat xxxiv, p 1164, C & & .
 no 4489, Hmpsn Ill Het. ix, pl 172, fig 7
 Trichotophysa olivalis, Wari A M N. H (6) xvii, p 457
- d. Golden olive, slightly irrorated and suffused with black Fore wing with two subbasal black specks, the upper on costa, an indistinct antemedial series of black specks, with traces of a waved line beyond them, a black speck before the discocellular tuft, the disk irrorated with black and rufous scales, a minutely dentate postmedial line excurved from vein 2 to 6, and with two indistinct dark streaks beyond its middle. Hind wing fuscous, the margin slightly tinged with rufous, both wings with marginal series of dark specks, the cilia white, chequered with black. Underside of hind wing with postmedial dentate line.

Hab. Bhutan, Khasis, Ceylon Exp. 22 millim

Genus ORTHAGA

Orthaga, Wik Cat xvi, p 191 (1858) Catamola, Meyr Trans Ent Soc 1884, p 68 Balanotas, Meyr Trans Ent Soc 1884, p 69 Pannucha, Moore, Lep Atk p 199 (1888) Hyperbalanotas, Warr A M N H (6) vii, p 433 (1891)

Type, O suadrusales, Wlk.

Range Japan; Oriental region; Australia.

Palpi upturned, reaching vertex of head, and roughly scaled. maxillary palpi filiform, autenum of male minutely serrate and fasciculate, tibum smoothly scaled. Fore wing with the apex rounded; slight tuits of raised scales below middle and beyond end of cell, vein 3 from near lower angle of cell, 4, 5 from the angle, 7, 8, 9 stalked, male usually with a furrow above vein 6, which is bent down to near 5, and a glandular lobe on costs at two-thirds from base, with veins 10, 11 curved round it. Hind wing with vein 3 from near angle of cell; 4, 5 from angle, 6, 7 from upper angle or shortly stalked

SECT. I (Orthaga). Male with no process from basal joint of antennæ

- A. Male with the maxillary palps filiform.
- 4468. Orthaga resciplaga, n. sp.
- d. Head and thorax grey suffused with dark rufous, abdomen rutous irrorated with tuscous. Fore wing grey, irrorated and suffused with dark rufous, traces of a minutely dentate antemedial line and more prominent postmedial line excurved from costa to yein 2, then bent outwards, the area beyond it dark rufous;

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a dark speck in end of cell and two on costa above it; a pink patch just beyond the discocellulars. Hind wing fuscous brown.

Hab. Bombay. Exp. 30 millim. Type in B. M.

- 4469. Orthaga rudis, Will. Trans Ent. Soc 3rd series, 1, p. 115, C & S no 4477.
- 2. Pale reddish brown and grey, slightly irrorated with fuscous. Fore wing with the basal half slightly tinged with olive, some black scales before the grey and rufous tufts below and at end of cell, the tuft beyond the cell dark, a dentate postmedial dark line with grey outer edge, excurved from the costa to vein 4, then incurved, a diffused dark line across its curve and sometimes white in the curve, a marginal series of dark specks Hind wing pale, suffused with fuscous brown on outer half, traces of a waved postmedial line, which is more prominent on underside.

Hab. "India", Nilgiris. Exp. 40 millim.

- 4470 Orthaga exvinacea, Hmpsn Ill Het vm, p 127, pl 154, fig. 9.
- 2 Differs from resciplaga in the basal two-thirds of fore wing being suffused with dull olive-green, a dark speck beyond the cell but no pink patch, the postmedial line regularly curved and crenulate, the outer area suffused with vinous and with a prominent series of dark marginal specks. Hind wing with dark marginal line Underside of hind wing pale to beyond the slightly waved curved postmedial line, the outer area fuscous.

Hab Nilgiris, W slopes Exp 30 millim.

- 4471. Orthaga irrorata, Hmpsn Ill. Het. ix, p. 156, pl. 172, fig. 1.
- P Head, thorax, abdomen, and fore wing clothed with grey, ferruginous, and fuscous scales, the last with a ferruginous spot at base, two obscure ferrugmous medial lines, a short black streak on median nervure and speck on discocellulars; a highly curved and minutely dentate postmedial dark line with rufous in its curve, grey outer edge, and the area beyond it suffused with brown; a marginal series of brown specks. Hind wing brown; the cilia grey-tipped. Underside brown, hind wing with obscure curved postmedial line.

Hab Ceylon. Evp. 28 millim.

4472. Orthaga enadrusalis, Wik Cat xvi, p. 191, Moore, Lep. Ceyl. 111, pl 178, figs 2, 2 a, C & S no 4488 Orthaga acontralis, Wlk Cat xxvii, p 103.

Head and thorax grey with a slight olive-green tinge; abdomen grey suffused with fuscous Fore wing yellowish white with an olive tinge and slight rufous and fuscous irroration, black specks at base and in middle of cell, a large antemedial black spot on costa, a curved minutely dentate postmedial line; the apical half of outer area fuscous, the inner half olive suffused with fuscous; cibs chequered with black. Hind wing fuscous, the ciba rufous, underside with indistinct medial curved line.

The larvæ hve as colonies in webs in cases formed of their own

excrement

Hab. Sikhim, Ceylon; Borneo, Java Exp. 32 millim.

4473. Orthaga molleri, n. sp.

o. Ohve-green, variegated with yellow and black. Fore wing with subbasal black mark on costa; an ill-defined double-waved antemedial black line; some black suffusion below lower angle of cell; a dentate postmedial line excurved beyond cell; marginal and cilial series of dark spots. Hind wing pale fuscous, with paler postmedial band with crenulate edges, a marginal line and series of specks on the cilia

Hab Sikhim, 7000 feet (Möller) Exp. 28 millim. Type

m B M

4474 Orthaga auroviridalis, n sp

Golden clive, frons and thorax marked with white, abdomen irrorated with fuscous. Fore wing with a white subbasal speck on costa, a white mark before the black tuft of scales below the cell, the medial area irrorated with black, an oblique white medial mark from costa, some black scales in the discocellular tuft, a submarginal crenulate black line excurved from veins 6 to 2 and with white outer edge, a marginal series of black specks. Hind wing fuscous brown Underside with indistinct crenulate submarginal line to both wings.

Hab Sikhim; Bhutan (Dudgeon) Exp, & 26, 2 34 millim.

Type in B. M.

B. Male with the 2nd joint of palpi hollowed out to receive the brush-like maxillary palpi.

4475 Orthaga onerata, Butl A M N H (5) 17, p. 447

Head and thorax clothed with olive-green and grey scales, the abdomen with white and black scales. Fore wing with the base olive-green, with a diffused grey line on it and a black mark at middle, the medial area grey, with traces of a waved olive antemedial line, a prominent black speck at end of cell, the outer area suffused with black and irrorated with grey towards margin; a curved crenulate postmedial line with grey outer edge, a marginal series of black specks, cilia chequered pale rufous and black. Hind wing pale fuscous, the cilia pale, with a dark line through them, underside with curved, slightly crenulate postmedial line.

Japanese specimens are rather browner than the female from Bhután

Hab. Japan, Bhután, Java. Exp. 24 millim.

SECT. II Male with a long process from basal joint of antennæ recurved over thorax, and with tufts of long scales below towards extremity.

A. (Panucha) Male with a glandular lobe on costa and ven 6 downcurved.

4476. Orthaga vitialis, Wlk Cat xix, p 897, C & S no 4474. Pyralis helvialis, Wlk xix, p 915
Catamola elassota, Meyr Trans Ent Suc 1884, p 280.

Pale rufous irrorated with fuscous. Fore wing with the basal area dark bounded by an oblique line, a dark medial spot on costa, an obscure antemedial line highly excurved from vein 6 to 2, where it is suddenly bent inwards, the whole apical area fuscous and some fuscous suffusion near outer angle; a marginal series of dark specks. Hind wing pale, with traces of minutely crenulate postmedial line, the margin suffused with fuscous, cilia of both wings pinkish.

Hab Ceylon; Australia. Exp. 26 millim.

4477 Orthaga basalis, Moore, Lep Ath p 200, pl 7, fig 2

d Head and thorax ochreous suffused with rufous, abdomen suffused with fuscous, and with rufous towards extremity. Fore wing of various shades of rufous, the costal and outer areas



Fig 71—Orthaga basalis, & }

tinged with olive, the basal and outer areas irrorated with white; an indistinct minutely dentate antemedial line, a dentate postmedial line excurved beyond cell. Hind wing pale fuscous, both wings with the margin dark, with white specks at the veins, the cilia rufous

chequered with black. Underside of fore wing fuscous, with some ochreous and black specks on middle of costa. Hind wing ochreous irrorated with black, a minutely dentate postmedial curved line, apical area fuscous

Hab. Sikhim; Nágas Evp. 32 millim.

4478 Orthaga ænescens, Moore, Lep. Atk p 200, C & S no 4478 Pannucha vicinalis, Snell Trans. Ent Soc 1890, p 567, pl 20, figs 2, 2 a.

Olive-green irrorated with black. Fore wing with a triangular black subbasal patch, with its base on the costa, its apex nearly touching inner margin, and with traces of a waved antemedial line beyond it, a black spot at end of cell, a minutely dentate postmedial black line highly excurved from veins 6 to 2, and with

olive-green on its outer edge, beyond which is black suffusion of a somewhat denticulate form; a marginal series of black specks, cilia pink and black. Hind wing fuscous; the cilia pinkish; underside with a curved minutely dentate postmedial line.

Hab. Sikhim; Nágas Eap., o 30, 2 32 milhm.

- B. Male with no glandular swelling on costa and vein 6 straight
- 4479. Orthaga euryzona, n. sp
- J. Head and thorax blackish, the antennal processes and patagra rufous; abdomen brown tanged with fuscous. Fore wing reddish brown, with a medial black band occupying half the wing, its inner edge sinuous, its outer excurved between veins 5 and 2. Hind wing pale rufous, with a fuscous patch beyond lower angle of cell and slight dark mark beyond it on the margin.

Hab. E. Pegu (Doherty). Exp. 22 millim. Type in coll. Elwes.

Subfamily CHRYSAUGINÆ.

Proboscis well developed, palm of extremely different types, maxillary palm absent; from usually with a conical tuft. Fore wing with vein 7 stalked with 8, 9 in female, the subcostal neuration varying greatly in the male in relation to the secondary sexual characters. Hind wing with the median nervure not pectinate-above, vein 7 almost always anastomosing with 8.

This subfamily is almost confined to the Neotropical region, where

it is very largely developed.

Key to the Genera.

A Palpi upturned, reaching just above vertex of head 1 Teratomorpha,
B. Palpi porrect, straight, and about four times length of head 2 Macna, p 129

Genus TERATOMORPHA.

Teratomorpha, De Nicéville, Jour. Bom N H Soc x, p. 192 (1896).

Type, T hampson, De Nicéville.

Range. Burma

Palpi upturned, the 2nd joint reaching vertex of head and moderately scaled in front, the 3rd short and naked; maxillary palpi absent; from rounded; antennæ almost simple; tibiæ with the outer spurs about two-thirds length of inner. Fore wing with the costs arched at base and excised beyond middle, the spex bent upwards, arched and falcate; the outer margin excised below apex, produced and hooked at middle, then excised to outer angle, the inner margin lobed, male with large costal glandular swelling at base, on underside with tufts of long hair proceeding from it;

vein 3 from before angle of cell; 4, 5 from angle; 7, 8, 9 curved; 10 from cell. Hind wing with the outer margin somewhat excised below apex and angled at vein 2, vein 3 from near angle of cell; 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing slightly with 8.

4480. Teratomorpha hampsoni, De Nicéville, Jour Bom N. H. Soc. x, p 192, pl. 1, f 52

J. Head dark vinous red; thorax and abdomen fuscous Fore wing dark sap-green; the base and costal area dark vinous red; a



Fig 72 — Teratomorpha hampsoni, & 1

large vinous-red discocellular reniform spot conjoined to the red costal area, extending below vein 2, and enclosing a green spot at its upper exterior edge; the outer area suffused with vinous-red scales. Hand wing fuscous brown, the inner area deep smoky black, the cilia

reddish. Underside fuscous brown; the outer area of fore wing vinous red; hind wing with indistinct pale sinuous submarginal line

Hab. Dawnat Range, Tenasserim Exp 32 millim.

Genus MACNA.

Macna, Wlh Cat xvi, p 78 (1858) Rhabana, Wlk Cat xxxiv, p 1517 (1865) Goossensia, Rag Ann Soc Ent Fr 1891, p 97.

Type, M pomalis, Wlk.

Range. Bhutan; Andamans, Malayan subregion.

Palpi porrect, with the 2nd joint three times the length of head and fringed with hair above and below, the 3rd long and fringed with hair below; antennæ ciliated, tibiæ and tarsi fringed with long hair. Fore wing with the costa arched, the apex produced to a point; the outer margin angled at vein 4 and excised from vein 4 to apex; vein 3 from before angle of cell; 4,5 from angle; 6 from upper angle; 7, 8, 9, 10 stalked. Hind wing with the outer margin very slightly angled at vein 2; the anal angle truncate; vein 3 from close to angle of cell; 4,5 shortly stalked; 6,7 stalked, 7 anastomosing slightly with 8.

Male with a large costal glandular swelling at base of fore wing on underside, with a thick tuft of silken hair from it directed obliquely downwards, the basal half of costa fringed with hair

below.

4481. Macna pomalis, Will Cat xvi, p 78, C & S no. 2829.
Goossensia prasinalis, Rag Ann. Soc Ent. Fr. 1891, p 98, id Mon.
Phyc. pl xlvi, fig. 4.

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Bright apple-green. Fore wing with indistinct fine waved rufous antemedial line, dentate in the cell, the reinform outlined by a fine rufous line, indistinct fine dentate postmedial and submarginal lines, the former with a white-centred spot on it below vein 2, the latter with a black spot above vein 2. Hind



Fig 73 -Macna pomalis, & 1

wing with a slight pinkish tinge, a pinkish spot on discocellulars; traces of waved postmedial and submarginal lines; cilia pinkish. Underside with the costal area of both wings and cell-spots pinkish.

Hab. Bhutan, Malacca; Singapore, Salanga. Eup., 3 50,

♀ 64 millim

4482. Macna platychloralis, Will Cat xxxiv, p. 1517.

d. Differs from pomals in the hind wing being vinous red above and below, and usually with the postmedial line prominent.

2 with large dark patches on area near outer angle of fore wing, and on anal area of hind wing.

Hab. Andamans, Java Exp., o 52-54, 2 62 millim.

Subfamily ENDOTRICHINÆ.

Build slender; maxillary palpi present, proboscis well developed. Fore wing with veins 7, 8, 9 stalked *. Hind wing with the median nervure non-pectinate; vein 7 anastomosing with 8.

Key to the Genera

A. Palpi upturned.	
a. Fore wing with veins 3, 4, 5 stalked	
a'. Fore wing with vein 2 absent, 7,	
8, 9, 10, 11 stalked	4 PETTA, p 187.
b'. Fore wing with vein 2 present, 7,	
8, 9, 10 stalked	3. Cangetta, p. 186
b. Fore wing with vein 3 from cell	
a' Palpi reaching far alove vertex of	
head, fore wing w. in veins 7, 8,	
9, 10 stalked	1. Rodaba, p 181.

^{*} In Hendecasts and some species of Trichophysetis vein 7 is absent.

b' Palpi hardly reaching vertex of head, fore wing with vein 10 free

B Palpi porrect

- a Palpi triangularly scaled, 3rd joint hidden in hair, both wings with veins 4, 5 approximated towards origin
- Palpi rostriform and downcurved, both wings with veins 4, 5 stalked
 Fore wing with vein 10 free,
 - antennæ with the shaft smooth

 b' Fore wing with vein 10 stalked
 - b' Fore wing with vein 10 stalked with 7, 8, 9, antennæ with the shaft annulate .
- c Palpi straight, two or three times length of head, maxillary palpi triangularly scaled
 - a' Palpi thickly fringed with hair above and below
 - b' Palpi nearly naked

- 2 Endotricha, p 132
- 9 Cotachena, p 142.
- 8 Rostripalpus, p 142.
- 7 PLEONECTOIDES, p 141
- 5 Trichophysetis, p 138 6 Hendecasis, p 140

Genus RODABA.

Rodaba, Moore, Lep Ath p 205 (1888)

Type, R angulipennis, Moore

Range Sikhim

Palpi obliquely upturned the 2nd joint reaching far above vertex of head and fringed with hair on both sides, the 3rd acute; maxillary palpi minute and filiform, antennæ nearly simple; tibiæ with the spurs long. Fore wing with the costa nearly straight, the apex falcate, the outer margin excised from apex to vein 4, where it is highly angled, then excised to outer angle, vein 3 from close to angle of cell, 4, 5 from angle, 10 stalked with 7, 8, 9. Hind wing with the apex somewhat produced; vein 3 from near angle of cell, 4, 5 from angle, 6, 7 from upper angle.

4483. Rodaba angulipennis, Moore, Lep Atk p 205, C & S.

Dark coppery red Fore wing with the medial part of costa-



Fig 74 -Rodaba angulipennis, &

leaden grey; an indistinct dark-edged grey antemedial band angled below the cell; a dark discocellular spot; a double oblique grey postmedial band with fuscous suffusion on its edges extending to the outer margin below

the angle cha white, dark at apex and middle. Hind wing fuscous, with traces of curved double postmedial line.

Hab Sikhim Exp 26 millim.

Genus ENDOTRICHA

Endotricha, Zell Isis, 1847, p 593
Doththa, Wile Cat xvii, p 285 (1859).

Messatis, Wile Cat xix, p 918 (1859)
Pacoria, Wile Cat xixiv, p 1256 (1865)
Zamia, Wile Cat xixiv, p 1256
Tricomia, Wile Cat xixiv, p 1259
Rhisina, Wile Cat xixiv, p 1324
Endotrichodes, Rag Ann Soc Ent Fr 1890, p 521
Endotrichopsis, Warr A M N H. (6) xvi, p 467 (1895)
Perisseretma, Warr A M N H. (6) xvi, p 468

Type, E flammealts, Schiff, from Europe

Range Universally distributed

Palpi upturned, hardly reaching vertex of head, and thickly scaled, maxillary palpi usually minute and filiform; antennæ of male culated, the basal joint somewhat dilated, patagia of male with long tufts of hair extending far beyond metathorax, abdomen with thick lateral anal tufts, legs long, slender, and smoothly scaled. Fore wing usually long and narrow, the costa arched towards apex, which is acute, vein 3 from before angle of cell, 4, 5 approximated towards origin or stalked, 10, 11 free Hind wing with vein 3 from before angle of cell; 4, 5 approximated towards origin or stalked, 6, 7 shortly stalked

- SECT. I. (Zamia). Male with the fore wing very broad, the inner margin expanded and lobed, the outer margin erect; hind wing very broad, with a fold running from the base through the cell to outer margin, the inner area expanded and lobed.
- 4484. Endotricha decessalis, Wik Cat xvii, p 890; Hmpsn Ill.

 Het ix, pl 172, fig 11, C & S no 4496

Differs from albacha in being more fulvous red, fore wing with the antemedial line dark, the submarginal line arising from the costa further from the apex and running obliquely to outer angle. Hab Ceylon, Burma; Sumbawa. Exp. 20 millim.

SECT II. Male with the wings normal.

- A. (Perisseretma). Maxillary palps of male twice as long as the labral, curved and meeting at apex, fringed with long scales on inner side towards extremity.
- 4485. Endotricha endotrichalis, Warr. A. M. N. H (6) xvi, p. 468
- 6. Purplish pink irrorated with fuscous. Fore wing with the basal area suffused with fuscous, its outer edge oblique; a prominent black discocellular spot; a quadrate black patch between lower angle of cell and vein 1; an indistinct oblique pale postmedial line; the outer area suffused with fuscous; a marginal series of black specks. Hind wing with traces of an antemedial and two postmedial pale lines; a marginal series of dark specks.

Hab. Mussooree. Exp. 16 millim.

B. (Endotricha). Maxillary palm of male normal a Antennæ of male with a spine on basal joint

4486. Endotricha mesenterialis, Wilh Cat xvii, p 285, Moore, Lep Ceyl 111, pl 178, fig 8, C & S no 4493

Endotricha suffusalis, Wlh. Cat xvii, p 390, C & S no 4495

Endotricha flavifimbrialis, Wari A. M. N. H. (6) viii, p 69

Endotricha eoidalis, Snell Tijd v Ent xxxviii, 1894, p 10, pl 5, figs 2, 3

d. Fulvous, wings with the basal area bright pink, bounded



Fig 75 Endotricha mesenterialis, &

by the antemedial line followed by an ochreous-yellow medial band running out along costa to near apex of each wing, the outer area suffused with pink Fore wing with sinuous submarginal yellow line and marginal pink band wing with sinuous postmedial hne, cilia golden yellow, pink

at apex and middle of fore wing, their bases with pink spots on hind wing

2 with the head, thorax, and abdomen often suffused with pink, sometimes leaving the anal segments fulvous, fore wing with the medial band and costal fascia more or less completely suffused with pink, hind wing completely suffused with pink

The form suffusalis has the basal area of both wings suffused

with fuscous

Hab. Formosa, NW Himalayas, Bombay, Nilgiris, Ceylon; Thavetmyo, Burma, E Pegu, Borneo, Java. Exp 18-22 millim.

b Antennæ of male with no spine on basal joint

4487. Endotricha albicilia, Hmpsn Ill Het viii, p. 130, pl 154, fig 22.

Fulvous suffused with pink, the wings slightly irrorated with Fore wing with the costa black, with small ochreous spots at regular intervals, an indistinct pale waved antemedial line; a dark speck at end of cell, a slightly crenulate dark submarginal Hind wing much pinker, the costal area and the internomedian interspace as far as the postmedial line ochreous; a curved medial pale line and slightly sinuous postmedial pale line ending at anal angle, cilia of both wings pale at base, pure white at tips.

Hab Sikhim, Nilgiris; Ceylon. Exp., ♂ 30, ♀ 20 millim.

4488. Endotricha costæmaculalis, Christ Bull. Soc Nat Mosc 1881, Endotricha fuscobasalis, Rag Ann Soc Ent Fr. 1890, p 526

of Fulvous suffused with pink and fuscous; thorax, base of abdomen, and basal area of wings strongly suffused with fuscous black. Fore wing with sinuous antemedial white line; a discocellular black lunule, a fulvous fascia and white specks on outer half of costa, a minutely dentate fulvous-edged dark submarginal line bent inwards below vein 6. Hind wing with the basal black area sending a large patch across the middle of the medial band which is pale, cilia bright yellow, black at apex of fore wing and middle of each wing. Underside of hind wing with the ante- and postmedial lines strongly outlined with black.

2 without the black suffusion on thorax, abdomen, and base of wings, hind wing with otherous medial band with the black ante-

and postmedial lines just inside its edges

Hab Siberia, Japan, Dalhousie, Sikhim Evp 24 millim.

4489 Endotricha fuscifusalis, n sp

dark red suffused with fuscous or fuscous brown Fore wing with ill-defined curved antemedial whitish line, a fulvous fascia and white specks on the outer half of costa, a white submarginal line minutely dentate below costa and bent inwards below vein 6, then straight Hind wing with a medial white band with some black on it and constricted at vein 2, cilia white, with their bases fuscous and pink or fuscous only in dark specimens, black at apex of tore wing and middle of each wing. Underside of hind wing with the ante- and postmedial lines strongly outlined with black.

Hab Murree, Dalhousie (Harford) Exp., of 22, 9 20 millim

Type in B M

4490 Endotricha serratalis, Snell Trans Ent Soc 1890, p 570

Q Head, thorax, and abdomen fuscous, with a few ochreous scales. Fore wing fuscous suffused with dark vinous red, a slightly sinuous white antemedial line with some ochreous suffusion beyond it at middle, a series of white specks on costa, a black discocellular lunule, a white submarginal line much bent inwards and dentate between veins 6 and 2. Hind wing whitish slightly suffused with fuscous, both wings with marginal series of black strias. Underside of hind wing fuscous, with irregular dark ante- and postmedial lines appreaching each other towards inner margin.

Hab. Sikhim Evp 24 millim.

4491 Endotricha loricata, Moore, Lep Ath p 206, C & S no 4497. Pyralis ustalis, Hmpsn Ill Het 1x, p 159, pl 172, fig 26

Pale brick-red suffused and irrorated with fuscous. Fore wing with a series of pale specks on the costa, a slightly oblique pale medial line with fuscous suffusion inside it, a dark cell-speck, a slightly curved submarginal dark-edged pale line running obliquely to outer angle, a marginal series of black specks. Hind wing suffused with fuscous except the medial pale-edged red band, which is widest towards inner margin, cilia of both wings pink and black.

Hab Calcutta Ceylon Exp 16 millim

4492 Endotricha ruminalis, Wlk Cat xvii, p 387, C & S no 4281. Pyralis ibycusalis, Wlk Cat xix, p 899, C & S no 4448 Endotricha symphonialis, Hmpsn Ill Het ix, p 161, pl 171, fig 17

Pale olive-brown. Fore wing slightly irrorated with black and with some dark specks on costa, an oblique white medial line with some red scales inside it on inner margin; a black discocellular speck, the outer area suffused with red and fuscous except at costa, a submarginal line with dark edge excurved from costa to vein 2, the area beyond it purplish red. Hind wing with the base pale olive, a black-irrorated pink medial band edged by slightly sinuous white lines, the area beyond it pink and black; cilia of both wings pink and black at base, pure white at tips. Underside with the postmedial line of hind wing strongly outlined with black

The Sikhim specimen is more suffused with fuscous, the cilia at middle of fore wing black

Hab. Sikhim, Rangoon, E Pegu; Ceylon Evp. 18 millim.

4493 Endotricha sondaicalis, Snell Tijd v. Ent xxiii, 1880, p 200; xxvi, p 123, pl 6, fig 6
Doththa similata, Moore, Lep Ath p 206, C & S no 4494

Differs from mesenterials in being uniform purplish pink. Fore wing with the pale curved autemedial line further from the base, the submarginal line oblique and slightly bent inwards below vein 6. Hind wing with the ante- and postmedial lines closer together below median nervure, cilia of both wings golden yellow, black at apex and middle of fore wing, and their bases pink and black except towards apex of fore wing

Hab Dharmsála, Sikhim, Celebes Evp 24 millim.

4494 Endotricha ardentalis, n sp

Q Dark crimson-red Fore wing with white specks on costa, a curved white antemedial line expanding into a spot below costa; a minutely waved double black submarginal line, cilia pale vellow, black at apex and below middle, the bases black from middle to outer angle Hind wing more crimson, with black-edged sinuous pale ante- and postmedial lines, cilia pale yellow, black at bases. Underside with black patch on disk of fore wing, the lines of hind wing strongly outlined with black

Hab. Bhután (Dudgeon) Evp 20 millim Type in B. M.

4495 Endotricha rufofimbrialis, Wair A M N H (6) viii, p 69.

A Head, thorax, and abdomen olive-yellow Fore wing olive-yellow, with indistinct curved antemedial line, a dark discocellular spot, the outer third of wing crimson except on costal area; traces of a submarginal line with a marginal crimson band beyond it. Hind wing crimson, with broad medial yellow band edged by black and white lines, cilia of both wings crimson, yellow below

apex. Underside with the base of fore wing blackish, and the black discocellular spot very prominent, hind wing with the post-medial line oblique and angled above anal angle.

Hab Bhutan, Borneo. Exp. 20 millim.

4496. Endotricha luteogrisalis, n sp

Head, collar, and abdomen orange-yellow, thorax fuscous Fore wing orange-yellow, the pale curved antemedial line with some fuscous suffusion inside it, the outer area pale purplish fuscous, with a slightly sinuous white line on its inner edge. Hind wing pale purplish fuscous, with broad white medial band suffused with orange-yellow and with some black suffusion on its sinuous edges; calia of both wings white with their bases fuscous.

Hab Bhután (Dudgeon). Exp. 20 millim Type in B. M

4497. Endotricha duplicilinea, Hmpm. Ill Het 1x, p. 159, pl. 171, fig 21

Q. Pale chestnut, abdomen suffused with black at base and towards extremity. Fore wing with subbasal oblique line of the ground-colour defined on its inner edge by black patches on costa and inner margin, on its outer edge by a black line, a black cell-spot, an oblique postmedial line defined on its inner edge by a black spot on costa and traces of a line, on its outer edge by a fuscous band. Hind wing with the base suffused with fuscous, with the pale subbasal line on it, a double fuscous postmedial line.

Hab. Ceylon Exp 14 millim

4498. Endotricha pygmæalis, Warr. A M N. H (6) xvii, p. 204

Head, thorax, and abdomen white marked with black, wings white Fore wing with black suffusion on basal costal area crossed by a subbasal white line, a curved antemedial white line defined by black, the inner medial area black, the discal and apical areas orange, a waved postmedial white line defined by black, running out to angles on veins 6 and 3, then retracted to below angle of cell, a fuscous and deep red patch on middle of outer area crossed by a submarginal white line, defined outwardly by black near costa and angled on vein 6, cilia fuscous at apex and middle. Hind wing with broad medial black band traversed by waved white ante- and postmedial lines and with a prominent quadrate white spot at lower angle of cell, outer area tinged with orange.

Hab. Khásis. Exp. 12 millim.

Genus CANGETTA.

Cangetta, Moore, Lep Ceyl ni, p 814 (1886)

Type, C recthnea, Moore. Range. W Africa, Khásis, Ceylon.

Palpi upturned and hardly reaching vertex of head, the 2nd joint

fringed with hair below, the 3rd conically scaled, maxillary palpi as long as the labial and dilated with scales at extremity, frons flat and oblique; antennæ annulated with rings at the joints, legs long and slender, the tibiæ somewhat hairy. Fore wing somewhat narrow, the apex rectangular, the cell short, veins 3, 4, 5 stalked, 6 from well below upper angle; 7, 8, 9, 10 stalked. Hind wing with the cell very short; vein 3 from the angle, 4, 5 on a long stalk, 6, 7 from upper angle, 7 anastomosing strongly with 8

4499. Cangetta rectilinea, Moore, Lep Ceyl m, p 314, pl 182, fig 3, C & S no 4331

Parapoynx griseolalis, Hmpsn Ill Het 1x, p 176, pl 174, fig. 12

White suffused with fuscous, palpi blackish, the 3id joint white. Forewing with the base of costa blackish, almost straight



Fig 76 — Cangetta rectilinea, of

blackish ante- and postmedial lines, the latter slightly defined with whitish towards costa, a black marginal line, towards apex becoming maculate and inwardly defined by white. Hind wing with traces of discocellular spot, a slightly curved postmedial fuscous line

terminating near anal angle, a black marginal line, obsolete below vein 2. Both wings with the cilia grey, with a dark line through them on fore wing and two on hind wing

Hab Ceylon. Exp 16 millim

4500 Cangetta albocarnea, Warr A M N H (6) xvn, p 149

Pale fulvous, head whitish. Fore wing with slightly curved fulvous antemedial line; an indistinct discocellular speck, a postmedial line straight from costa to vein 2, then slightly retracted and inwardly edged by diffused white from costa to vein 5, a submarginal line with series of dark specks on it, becoming almost marginal at vein 5, a marginal line. Hind wing with antemedial fulvous line, a postmedial line oblique from costa to near the margin at vein 2, then retracted and obsolescent; some dark specks on apical part of margin.

Hab. Khásis, Ceylon Exp 12 millim

Genus PETTA

Petta, Warr A M. N H (6) xvi, p 469 (1895)

Type, P alternata, Warr Range. Assam, Ceylon

Palpi obliquely upturned, the 2nd joint fringed with very long hair below, the 3rd long, naked, and acute, maxillary palpi large and triangularly scaled, antennæ of male ciliated; tibiæ nearly

smooth, the spurs long Fore wing with the outer margin excised below apex, vein 2 absent; 3, 4, 5 stalked; 6 from upper angle; 7, 8, 9, 10, 11 stalked Hind wing with vein 3 from angle of cell; 4, 5 stalked, or 3, 4, 5 stalked, 6, 7 from upper angle.

SECT. I. Hind wing with vein 3 from angle of cell.

4501 Petta costastrigalis, n. sp

Pale ochreous, irrorated and suffused with red-brown, head and



Fig 77 -Petta costistrigalis, S. ..

palpi above white Fore wing with pairs of oblique white streaks on costa forming subtriangular marks; an obscure dentate antemedial line; a discocellular black spot, an obliquely sinuous postmedial line bent inwards above vein 1, a dark apical patch. Hind wing whitish, with indistinct

sinuous submarginal line, both wings with fine sinuous lines on margin and cilia

Hab. Ceylon (Green) Exp. 14 millim. Type in B. M.

SECT. II. Hind wing with veins 3, 4, 5 stalked.

4502. Petta alternata, Warr. A M. N H (6) xvi, p 469

d Grey, much irrorated and suffused with black-brown; from white, abdomen ringed with white. Fore wing with two subbasal whitish lines excurved at middle, three triangular white-edged black marks on costa, both wings with submarginal white line angled on veins 5 and 2, then bent inwards to middle of inner margin, a sinuous black line just inside the margin and a marginal line. Hind wing paler.

Hab. Khásis. Exp 12 millim.

Genus TRICHOPHYSETIS.

Trichophysetis, Meyr Trans Ent Soc 1884, p 287 Callinaias, Swinh Trans Ent Soc 1890, p 286

Type, T. cretacea, Butl, from Japan, Australia, Norfolk Island.

Range Japan, Assam, Ceylon; Burma; Australia; Norfolk Island.

Palpi porrect, about twice as long as head, and thickly tufted with hair, the 3rd joint hidden. Maxillary palpi with a long pointed tuft of hair from extremity extending nearly as far as the labial palpi, from rounded; antennæ thickened and flattened; legs with the spurs long and equal. Fore wing with the apex rounded, veins 3, 4 from angle of cell; 5 from above angle, 7, 8,

9, 10 stalked, or 7 absent, or 10 from cell. Hind wing with vein 5 from above angle of cell, which is short, 6, 7 from upper angle

SECT I (Trichophysetis) Hind wing with veins 3, 4 from cell.

A. Fore wing with vein 7 present, 10 from cell

4503 Trichophysetis nigripalpis, Wair A M N H (6) xvii, p 149

J. Very pale fulvous, palpi and frons jet-black, both wings with two curved fulvous medial lines bounding a pale broad medial band, fore wing with the apex brighter fulvous, inwardly defined by an indistinct dark line

Hab. Khásis Eap 18 millim

B Fore wing with vein 7 absent

4504 Trichophysetis nigridiscalis, Warr A M N H (6) xvi, p 470

d. Whitish; frons, maxillary palpi above, metathorax, and abdomen except 1st segment black. Fore wing with black patch from near base of inner margin to upper angle of cell and outer angle, a subbasal line, a smuous medial black line angled below costa, a white discocellular speck, a postmedial line highly excurved below costa and waved towards inner margin, a subcostal black speck near apex, a white, black, and orange lunule on margin below apex. Hind wing wholly suffused with fuscous black except basal and costal areas, a curved antemedial and double postmedial black lines

Hab. Khásis Evp 16 millim

SECT II (Callinaias) Hind wing with veins 3, 4 stalked.

4505 Trichophysetis nigricineta, *Hmpsn Ill Het* 1x, p 180, pl 174, fig 15

J. Yellowish white, abdomen with a deep black dorsal band

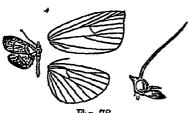


Fig 78
Trichophysetis nigricincta, 3 1.

on 2nd segment Fore wing with black speck at base; double curved ante- and post-medial lines, the latter outwardly oblique; the apical area fulvous, with a black line from below costa to outer margin at vein 3. Hind wing with double antemedial line, the inner one fulvous and indistinct, the outer prominently black from

cell to inner maigin, a double postmedial line, the inner one fuscous and most prominent

Hab Khásis, Ceylon. Exp. 18 millim.

4506. Trichophysetis gracilentalis, Swinh Trans. Ent. Soc 1890, p 287, pl 8, fig 6

d Head black, thorax and abdomen yellowish white Fore wing silky yellowish white, with traces of curved medial and post-medial ferruginous lines, most prominent towards costa, a large apical black patch. Hind wing with the base yellowish white, becoming rufous suffused with fuscous on outer area, traces of antemedial and medial ferruginous lines and of a diffused fuscous submarginal band.

Hab Bhután, Rangoon Eap. 14 millim.

Genus HENDECASIS, nov

Type, H duplifascialis, Hmpsn Range W. Africa, India, Ceylon.

Palpi porrect, straight, and nearly naked, about three times the length of head, the 2nd joint long, the 3rd well developed, maxillary palpi triangularly scaled, from rounded, antennæ annulate and somewhat thickened. Fore wing with the apex acute, the outer margin excurved at middle, veins 3, 4, 5 from angle of cell, 7 absent, 8, 9, 10 stalked. Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle.

4507 Hendecasis duplifascialis, *Hmpsn Ill Het* viii, p 141, pl 156, fig 18

White with a fulvous tinge, palpi and frons blackish, abdomen suffused with fulyous and with fuscous towards extremity. Fore



Fig 79 Hendecasis duplifasoralis, 3 3

wing with ill-defined pale fulvous subbasal band, a sinuous fuscous antemedial line with fulvous band inside it, an indistinct white lunule at end of cell, a postmedial fuscous line highly excurved beyond cell, a black spot beyond it above vein 5, the apical area fulvous, a fuscous

line from costa near apex, becoming almost marginal at vein 6, and with some white inside it. Hind wing with double sinuous black ante- and postmedial lines, becoming obsolete on costal half of wing and with fulvous between them, slight white marks on margin and black specks between vein 2 and anal angle

Hab W. Africa, Dharmsála, Nilgiris, Ceylon Exp. 14-

16 millim

4508. Hendecasis fulvalis, Hmpsn Ill Het 1x, p 180, pl 174, fig 7.

Q Differs from duplifasculis in the palpi being orange-yellow Fore wing with the inner area between the ante- and postmedial lines orange, the postmedial double line bent outwards at vein 5and reaching outer margin near outer angle—Hind wing with the apical area much suffused with fulvous, the ante- and postmedial double lines more oblique, reaching the inner margin nearer the anal angle, and not obsolete but widely separated on costal half of wing, no black specks on the margin and hardly a trace of white.

Hab Ceylon Evp 14 millim

Genus PLEONECTOIDES.

Pleonectoides, Hmpsn Ill Het viii, p 134 (1891)

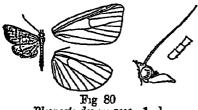
Type, P vnnacea, Hmpsn

Range Assam, Nilgiris, Sumbawa

Palpi porrect and rostriform, projecting about twice the length of head, the 2nd joint thickly clothed with hair concealing the 3rd; maxillary palpi dilated with scales, from oblique, antennæ annulated with rings at the joints, legs long and slender, the outer spurs about half the length of inner, abdomen with lateral tufts towards extremity. Fore wing long and narrow, vein 3 from angle of cell, 4, 5 on a long stalk, 6 from below upper angle; 7, 8, 9, 10 stalked, and 11 closely approximated to them Hind wing narrow, vein 3 from angle of cell, 4, 5 on a long stalk; the cell short, 6, 7 stalked.

4509 Pleonectoides vinacea, Hmpsn Ill Het vin, p 134, pl 155, fig 19

J. Pale rufous suffused with purplish fuscous, palpi white below, from white at sides, abdomen fuscous towards extremity,



Pleonectordes vinacea, &

the anal tuft white Forewing with the basal two-thirds of costa dark, the apical third fulvous, curved ante- and postmedial lines, the latter slightly angled inwards on vein 2 Hind wing with the costal and inner areas whitish, an obliquely curved postmedial

line, becoming obsolescent towards anal angle; cilia of both wings whitish. Underside of hind wing white, with the postmedial line dark.

Hab. Nilgiris. Exp. 20 millim.

4510. Pleonectoides sericialis, n sp.

Q. Pale silky purplish grey; a minutely waved indistinct submarginal line, slightly excurved between veins 6 and 2 of fore wing, straight on hind wing, and terminating on outer margin at vein 2; a marginal series of dark specks, terminating at vein 2 of hind wing

Hab Margharita, Assam; Sumbawa (Doherty) Erp 16 millim. Type in coll, Elwes.

Genus ROSTRIPALPUS, nov.

Type, R. longipennis, Hmpsn Range S. India, Ceylon.

Palpi rostriform, curved downwards and reaching well beyond the slight frontal tuft, maxillary palpi minute; antenne of female minutely chated, tabie with the spurs long. Fore wing very long, narrow, and produced at apex, vein 3 from angle of cell; 4, 5 stalked, 7, 8, 9 stalked; 10, 11 from cell. Hind wing with vein 3 from angle of cell, 4, 5 stalked, 6, 7 from upper angle, 7 anastomosing strongly with 8.

4511 Rostripalpus longipennis, Hmpsn III Het viii, p 128, pl. 154, fig 20.



Fig 81
Rostripalpus longipennis, Q

Q Dull purplish irrorated with fuscous Fore wing with pale specks on outer half of costs, indistinct erect black medial and postmedial lines, a fuscous discocellular spot. Hind wing with indistinct antemedial and medial black lines, highly angled at middle, both wings with a pale line at base of cilia.

Hab. Nilgiris, Ceylon. Exp 16 millim.

Genus COTACHENA.

Cotachena, Moore, Lep. Ceyl m, p. 275 (1885)

Type, C. histricalis, Wlk.

Range China; India, Ceylon, Solomons

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform, frons rounded, antennæ of male with long cilia; hind tibiæ with the outer medial spur about half the length of the inner. Fore wing with the retinaculum formed by a large valve of scales from below median nervure in both sexes; the costa arched towards apex, the outer margin oblique, the cell short; vein 3 from beyond angle of cell, 4, 5 closely approximated for about half their length. Hind wing with the cell very short, vein 3 from angle of cell, 4, 5 approximated for about one-fourth length; 6, 7 from upper angle, 7 anastomosing strongly with 8.

4512. Cotachena histricalis, Wil. Cat xvii, p. 655, Hmpsn. Ill. Het. ix, pl 172, fig 5, C & S no. 4855.
Archemis pubescens, Warr. A M N H. (6) ix, p. 800.

Palpi black, white below; thorax and abdomen yellow. Fore



Fig 82 - Cotachena histricalis, &

wing yellow suffused with rufous and fuscous, an antemedial dark line with a more or less prominent hyaline speck before it in the cell and a large quadrate hyaline spot beyond it with black outer edge, a large hyaline medial spot below vein 3, with a line from it to inner margin; a

lunulate dark-edged hyaline spot from costa to vein 5, with a line from it to vein 3. Hind wing pale orange, with a dark cellspeck, a postmedial line bent outwards between veins 5 and 2 and often reduced to spots.

The Chinese and Dharmsala race pubescens is smaller, with the fore wing more suffused with fuscous than the typical southern

form

Hab China, Dharmsála; Sikhim, Nágas, Nilgiris, Ceylon. Exp. 22-26 millim

Subfamily PYRALINÆ.

Proboscis usually well developed, maxillary palpi present and usually filiform Fore wing with vein 7 stalked with 8, 9. wing with the median nervure non-pectinate, vein 8 free

Key to the Genera

A. Hind tarsi with no tuft of hair on 1st a. Palpi with the 2nd and 3rd joints upturned a'. Proboscis absent or minute, fore wing with veins 4, 5 stalked or closely approximated towards origin a² Fore wing with vein 9 stalked with 7, 8, hind wing with vein 4 present b2 Fore wing with vein 9 from cell,

3 Aglossa, p 147.

.. 2 CROCALIA, p 147.

b. Proboscus well developed a² Abdomen long and dilated at

hind wing with vein 4 absent

extremity, antennæ of male with short branches

b2 Abdomen normal, antennæ of male ciliated

 a^3 Hind wing with veins 4, 5 stalked

a4. Fore wing with vein 7 from 8

b4 Fore wing with vein 7 from 8 before 9. 1 VITESSA, p 145

4. Hypsopygia, p. 148

5 Pyralis, p. 149.

b ³ Veins 4, 5 of each wing approximated for about one-third length c ³ Veins 4, 5 of neither wing approximated towards origin	6	TEGULIFERA, p 152
a' Fore wing with vein 7 from 8 before 9 a' Maxillary palpi well deve- loped b' Maxillary palpi minute b' Fore wing with vein 7 from 8 after 9	7	Larice, p 158 Stemmatophora, [p 154 Euryzona, p 168
Palpi obliquely upturned, the 3rd joint		— с
porrect a' Fore, wing with veins 4, 5 approxi-		
mated for about one-third length		
a ² Proboscis well developed, antennæ	70	77
of male cultated	ΤO	HERCULIA, p 159
male with short branches	9	TAMBACA, p 158
b' Fore wing with veins 4, 5 not approxi-		
mated towards origin a ² Fore wing with vein 7 from 8		[p 163
after 9	12	RHYNCHOPYGIA,
before 9	10	TRIPHASSA, p 169
. Palpı straight and porrect	TO.	THIERWOON'S TOO
a. Veins 4, 5 of each wing approximated		
for about one-third length a Palpi with a long sharp tuft of hair		
at end of 2nd joint below	27	LORYMA, p. 183.
b ² Palpi with no tuft of hair on 2nd		· -
joint b' Vens 4, 5 of neither wing approxi-	28	TYNDIS, p 185
mated towards origin		
a ² Maxillary palpi well developed,		
palpi about the length of head, fore wing with vein 7 from 8		
before 9 ,		DISCORDIA, p 186.
b ² Maxillary palp: m:nute, palp: about two and a half times length of		
head, fore wing with vein 7 from		
8 after 9		Proteinia, p. 182
d. Palpi rostriform and downcurved at extremity		
a'. Fore wing with vein 6 from the cell		
a ² Palpi less than twice the length of		
head. a ³ Maxillary palpi triangularly		
scaled	28.	Constantia, p. 183.
6° Maxillary palp: filiform and well developed, from usually with		
a sharp tuft		
at Veins 4, 5 of neither wing		
approximated towards origin as. Abdomen without dorsal		
tufts, fore wing with the		
costs not arched at base	22.	Bostra, p. 175.

b⁵ Abdomen with dorsal tufts, fore wing with the costa 16 OMPHALOCERA, p 167. arched at base b' Veins 4, 5 of each wing approximated for about one-third 19 Paractenia, p 172 length or stalked c1 Maxillary palpi minute at Fore wing with veins 4, 5 23 Diloxia, p 179 from angle of cell . b1 Fore wing with veins 4, 5 17 Toccolosida, p 168. stalked b' Palpi more than twice the length of head a3 Maxillary palpi filiform, frons with a sharp tuft, hind wing of male with a tuft of hair near 20 Prosaris, p 173 inner margin above b3 Maxillary palpi minute, from smooth, palpi with the 2nd joint short, the 3rd long, in male with a fringe of hair on inner 21 TREBANIA, p 174 side arising from a groove b' Fore wing with vein 6 stalked with 7, 8, 9 a^2 Fore wing with vein 10 free 15 Нуволома, р. 167. b2 Fore wing with vein 10 stalked with 6, 7, 8, 9 25 ORYBINA, p 181. B Hind tais with a large tuft of hair on 1st joint a Palpi long, rostriform and fringed with hair in male, upturned in female 14. RHYNCHETERA, p 166 b Palpi long, rostriform, and smoothly scaled in both sexes, male with tufts of hair at end of 2nd and on 3rd 24 Propachys, p 180 joint, forming a cavity c Palpi short and straight, hardly reaching

Genus VITESSA.

18. SACADA, p 169

Vitessa, Moore, Lep. E. I C p 299 (1858)

Type, V suradeva, Moore

beyond the frontal tuft

Range Sikhim, Assam, S India, Ceylon, Burma, Anda-

mans, Nicobars, Celebes, Ceram, New Guinea.

Palpi upturned, slender, and smoothly scaled, the 2nd joint reaching vertex of head, the 3rd long, maxillary palpi dilated with scales, antennæ bipectinate in male with very short branches dilated at extremity, thickened and flattened in female; tibiæ slightly fringed with hair, abdomen dilated at extremity and with large anal tuft, the claspers of male very large and usually protruded. Fore wing long and narrow, the costa arched towards apex, vein 3 from near angle of cell, 4, 5 stalked in male, approxition of the costa arched towards apex.

mated in female, 9 given off from 8 after 7. Hind wing with vein 3 from near angle of cell, 4, 5 and 6, 7 stalked in male, 4, 5 approximated in female

4513 Vitessa suradeva, Moore, Lep E I C. p 299, pl vii a, fig 7, C & S no 4516.
Vitessa formosa, Feld Reis Nov. pl 137, fig 1, C & S no 4514
Vitessa rama, Moore, Lep Ceyl. iii, p. 256, pl 178, fig 4, C & S no 4515

Head and thorax golden yellow, 3rd joint of palpi and antennæ black; collar and patagia with paired metallic black spots, the latter tipped with black and the mesothorax with a black spot, abdomen banded black and white, anal tuft orange. Fore wing with the base golden yellow, two subbasal metallic black spots,



Fig 83 — Vitessa suradeva, d. +

two quadrate black antemedial patches; the medial area greyish white, with an irregular medial band of dentate marks enclosing an oval white spot below the costa, outer area black, the veins streaked with white Hind wing white, the outer half bluish black; cilia of both wings greyish. Underside of fore wing black, with medial maculate white band; the veins towards apex streaked with grey, legs banded black and white.

Hab Sikhim, Assam, hills of S India, Ceylon, Burma; Mergui, Andamans, Borneo. Eup, 3 46, 2 52 millim.

4514. Vitessa nicobarica, n sp.

J. Differs from suradeva in the abdomen being wholly yellow and orange. Fore wing with the basal orange patch reduced, the antenedial band reduced and interrupted in cell, the streaks on veins of outer area almost obsolete. Hind wing pale yellow, slightly irrorated with black, especially at apex. Underside pale yellow, the outer area of fore wing black narrowing to outer angle, hind wing with an apical black patch.

Q with the streaks on outer area of fore wing well developed, hind wing whitish; the costal area black, the outer area suffused with black narrowing to anal angle Underside as in suradeva, but with the marginal band of hind wing narrowing to anal angle

Hab Nancowry, Nicobars. Exp. 44 millim. Type in B. M.

Genus CROCALIA.

Crocaha, Rag Ann Soc Ent France, 1891, p 634

Type, C. aglossalis, Rag

Range Sind

Differs from Aglossa in the 2nd joint of palpi being less broadly fringed with hair, the maxillary palpi minute Fore wing with veins 4, 5 stalked, 7, 8 on a long stalk; 9 from cell. Hind wing with veins 3 and 5 from angle of cell, 4 absent.

4515 Crocalia aglossalis, Rag Ann Soc Ent France, 1891, p 635



Fig 84 -- Crocalia aglossalis, &

Hab. · Karáchi Erp 16 millim

d. Ochreous irrorated with dark red and fuscous scales Fore wing with very obscure diffused subbasal darker band a highly waved oblique antemedial line, a discocellular black spot, a highly waved submarginal line Hind wing ochreous white

Genus AGLOSSA

Aglossa, Latr Précis Caract Gén Ins p 145 (1796)

Type, A pinguinalis, Linn

Range. Universally distributed

Proboscis absent, palpi upturned well in front of frons, the 2nd joint fringed with hair in front and reaching vertex of head, the 3rd long, maxillary palpi dilated with scales at extremity; antennæ of male cliated and with long setiferous spines, hind tibiæ fringed with hair on outer side towards base Fore wing long and narrow; vein 3 from near angle of cell; 4, 5 closely approximated or stalked; 6 from upper angle Hind wing with vein 3 from angle of cell, 4, 5 closely approximated or stalked; 6, 7 from upper angle

SECT. I Veins 4, 5 of each wing stalked.

4516. Aglossa dimidiata, Haw Lep Brit p 372, C & S no 4501. Aglossa micalialis, Will Cat xvii, p 277 Pyralis circularis, Motsch Et Ent 1860, p 37 Aglossa achatına, Butl Ill Het ni, p 72, pl 58, fig 6



Fig 85 - Aglossa dimidiata, o

Pale pinkish; abdomen of male with the anal tuft orange. wing with ırregular pınkısh rufous dentate lines, the subbasal obsolescent except at costa, the antemedial, medial, and postmedial angled inwards on median nervure and vein 1,

and the last greatly excurved between veins 4 and 1; the sub-

marginal regularly curved. Hind wing fuscous; cilia of both wings pale rufous.

Hab Japan; China, Nilgiris; Bernardmyo, Burma. Exp. 24

millim.

SECT. II. Veins 4, 5 of each wing closely approximated for about one-third length.

4517. Aglossa pingumalis, Linn. Faun. Suec p 351, id. Syst Nat i p 882, C & S no 4503

Aglossa pinguinalis, var asiatica, Ersch. Hor Soc Ent. Ross vill.

Aglossa pinguinalis, var aldidalis, Christ Hor. Soc Ent. Ross x, p 41

Differs from dimidiata in being pale fuscous marked with dark brown; head tinged with fulvous. Hind wing pale, with more or loss distinct dentate medial line, the outer area fuscous, narrowing to anal angle.

The form asiatica, ranging from Syria to the N.W. Himalayas,

is considerably paler than the European form.

Hab. Europe, Syria, Afghanistan; N.W. Himalayas 3 22-24, 9 34-44 milim.

Genus HYPSOPYGIA.

Hypsopygia, Hubn Verz p 348 (? 1818)

Type, H. costalis, Fabr, from Europe.

Range Palmarctic and Nearctic regions; Japan; China; India, Ceylon, and Burma; Australia

Differs from Pyralis in the fore wing having vein 9 given off from 8 before 7.

4518 Hypsopygia mauritialis, Boisd Faun Ent Madag, Lép. p 119, pl 16, fig 8 Pyralis lucillalis, WM. Cat xvii, p 268, C & 8 no 4454
Pyralis ducalis, WM. Cat xxxiv, p 1242.
Pyralis regalis, WM. Cat xxxiv, p 1241
Hypsopygia laticulialis, Ray Ann Soc Ent Fr 1891, p 28



Fig 86 Hypsopygia mauritialis, &

Bright pink or purplish pink, vertex of head orange Fore wing with ante- and postmedial sinuous pale lines arising from small orange spots on the costa and with orange specks on the costa between them, an obscure dark discocellular lunule. Hind wing with pale sinuous anteand postmedial lines, the cilia

and margin of both wings bright orange

Hab. Madagascar, China; N.W. Himalayas. Manipur; Poona, Burma, Sumatra; Java; Celebes. Exp., 3 20, \$\Q24\$ millim.

4519. Hypsopygia postflava, *Hmpsn. Ill Het.* ix, p. 159, pl. 171, ig. 22.

Differs from mauritalis in being very dark purple; the vertex of head concolorous; the terminal four segments of abdomen bright yellow.

Hab. Bhután; Margharita, Assam; Ceylon. Exp 18 millim.

4520. Hypsopygia regina, Butl A M N. H. (5) iv, p 452

Q Dark purplish fuscous. Fore wing with traces of curved dark antemedial line and of postmedial line arising from an orange costal spot; some yellow specks on medial part of costa. Hind wing bright pink irrorated with fuscous; the marginal area suffused with fuscous; sinuous antemedial and medial orange lines slightly outlined with black; cilia of both wings bright golden yellow.

The Ganjam specimen is dark with no red on hind wing and the

cilia dusky.

Hab. Japan; Aska, Ganjam; Rangoon. Exp 16 millim.

4521. Hypsopygia olivalis, Swinh A M. N. H (6) xvi, p 301.

Q. Head and thorax olive-green irrorated with black; abdomen fuscous irrorated with black, the anal tuft ochreous. Fore wing olive-green irrorated with black, a pale sinuous antemedial line with black outer edge; a similar postmedial line incurved below vein 5, a black discocellular spot; some pale specks on medial part of costa, a marginal series of black specks. Hind wing fuscous, with curved dark postmedial line.

Hab Mahableshwar Exp 20 millim.

Genus PYRALIS.

Pyralis, Linn Syst Nat XII, p. 881 (1767)
Asopia, Treitschke, Schmett Eur vi, 2, p 316 (1828)
Sacatia, Wlk Cat XXVII, p 123 (1863)
Eutrichodes, Warr A M N H (6) VII, p 498.

Type, P. farmalis, Linn, from Europe.

Range. Universally distributed.

Palpi upturned, the 2nd joint fringed with hair in front and reaching vertex of head, the 3rd of moderate length, maxillary palpi filiform; antennæ of male ciliated; tibiæ moderately hairy. Fore wing with the apex rounded; vein 3 from before angle of cell; 4, 5 usually stalked; 7 given off from 8 before 9; 10, 11 free. Hind wing with vein 3 from before angle of cell; 4, 5 and 6, 7 stalked.

SECT. I. Veins 4, 5 of fore wing approximated for a short distance.

4522 Pyralis recisalis, Swinh P Z S 1885, p 866, C. & S no 4463 Pale reddish brown slightly suffused with fuscous. Fore wing

with waved black ante- and postmedial lines arising from spots on the costa, the former excurved at median nervure, the latter beyond lower angle of cell, a series of dark marginal specks.

Dharmsála specimens are greyer and without the reddish tinge; the lines of fore wing fuscous, and a spot on discoccilulars is

present.

Hab Dharmsála, Bombay. Exp. 22 millim.

SECT II Fore wing with veins 4, 5 stalked.

4523. Pyralis pictalis, Curt Br. Ent vi, pl 508, C. § S. no. 4458. Pyralis pronoeslis, Wlk. Cut xix, p 906
Pyralis proximalis, Wlk. Trans. Ent. Soc. 1862-64, p 120, C § S. no 4460
Myelois bractiatells, Wlk. Cut xxvii, p 36; Moore, Lep Ceyl. m, pl. 178, fig. 5, C. § S. no 4448.
Pyralis elachia, Buth. Ill. Het. m, p 70, pl. 58, fig. 3, C. § S. no 4444.

Head and collar pale brown; thorax and abdomen suffused with fuscous. Fore wing with the base black, bounded by a sinuous white line; the medial area pale brown irrorated with a few black scales, a black cell-spot and some pale specks on costa; a post-medial sinuous white line with the area beyond it red. Hind wing with the base black, bounded by a sinuous white line, the medial area pale brown suffused with fuscous, an irregularly waved white postmedial line with fuscous on its outer edge, the outer area whitish with fuscous on the margin.

Hab. Europe; W. Africa; Japan, N.W. Himalayas, Nágas; Ceylon, Burma; Sumatra; Gilbert Islands Exp. 18-22 millim.

- 4524. Pyralis ravolalis, Wik Cat xix, p. 898, Hmpsn Ill Het ix, pl. 172, fig 15, C & 8 no 4462
- Q. Differs from pictals in the head, thorax, and abdomen being paler. Fore wing with the basal area grey, some rufous at base and on inner edge of the antemedial line, which is more oblique, the postmedial line incurved at middle instead of excurved, oblique and terminating at outer angle. Hind wing with the postmedial line running out to near the margin from veins 4 to 2, then bent in to near the antemedial line; a series of prominent black specks on apical part of margin

Hab. Ceylon, Borneo. Emp 20 millim

4525. Pyralis funebralis, Warr A M N H (6) xvi, p 464

Q. Fuscous brown with a grey tinge Fore wing with the basal area rather darker and bounded by a sinuous white line, a dark discoccilular spot; some white specks on medial part of costa and a white patch at the origin of the obsolescent postmedial line, which is excurved between veins 6 and 2 Hind wing with the

PYRALIS. 151

basal area darker; sinuous ante- and postmedial white lines; the outer area greyer.

Hab. Khásis Evp. 30 millim.

4526. Pyralıs elongalıs, Koll Hugel's Kaschmır, 1v, p 493, C & S. no 4445
Pyralıs mensalıs, Guen Delt & Pyr p 120
Pyralıs marmorea, Butl. Ill Het vn, p 91, pl 134, fig 10

Differs from pictalis in the male having the cilia of antennæ long; the thorax and abdomen less suffused with black. Fore wing with sinuous edge to the basal black patch; the medial area suffused with fuscous brown, the postmedial line more excurved and minutely dentate from vein 6 to 2, the area beyond it suffused with fuscous; a marginal series of dark specks. Hind wing pale fuscous, with traces of a pale waved postmedial line

One specimen has the medial area of fore wing much suffused

with black

Hab. N.W. Himalayas Exp., of 20-24, 2 26-30 millim.

4527. Pyralis manihotalis, Guen Delt & Pyr. p. 121.
Pyralis vetusalis, Wik Cat xix, p. 891
Pyralis gerontesalis, Wik Cat xix, p. 896, Moore, Lep. Ceyl iii, pl 178, fig 6, C & S no 4447
Sacatia laudatella, Wik Cat xxvii, p 124
Pyralis despectalis, Wik Cat xxxiv, p 1248
Pyralis miseralis, Wik Cat xxxiv, p 1244
Pyralis achatina, Butl Ent Mo Mag xiv, p 49

Differs from elongalis in the ground-colour being pale rufous



Fig 87 —Pyralis manihotalis, 3

suffused with fuscous. Fore wing with the basal patch dark rufous; the postmedial line much less excurved beyond the cell; the outer area not darker than the medial area. Hind wing pale rufous suffused with fuscous and with fuscous inside the pale dentate medial line.

Pupates in a very open network of black silk.

Hab. Neotropical, Oriental, and Australian regions. Exp., 516,
2 22 millim.

4528. Pyralis fumipennis, Butl Ill Het. v11, p 91, pl. 134, fig 11. Pyralis minimalia, Hmpsn Ill Het ix, p 159, pl 171, fig 18

Differs from pictalis in the thorax and base of fore wing being purplish red, the latter with the white line bounding it oblique at costa; the medial area suffused with fuscous at inner margin; the outer red area wider, ochreous at apex and with traces of silvery submarginal band and line. Hind wing more suffused with fuscous on medial area.

The form minimalis from Ceylon is small with the rufous areas darker.

Hab Simla; Dharmsála; Ceylon. Exp. 18 millim., minimalis 12 millim.

- 4529. Pyralis subresectalis, Snell. Trans. Ent. Soc. 1890, p 565.
- Q. Pale ohve-brown. Fore wing with the apex produced and acute, an indistinct slightly curved pale antemedial line; a black speck at upper angle of cell; a pale incurved postmedial line, with the area beyond it bright red; the cilia pale, red at apex. Hind wing fuscous suffused with rufous; traces of dark antemedial and medial lines; some dark specks on margin at apex. Underside with cell-speck and pale waved postmedial line to both wings.

Hab. Sikhim. Exp. 24 millim.

4530. Pyralis regalis, Schiff. Wien. Verz. p 124.
Pyralis pulchellalis, Mill Cat Lép Alpes-Marit pt 2, p 214 (1878).
Pyralis princeps, Butl. Ill Het. vii, p. 91, pl. 134, fig 12.

Head and collar fulvous; thorax and abdomen purplish fuscous. Fore wing bright purple, with a large triangular golden-yellow and orange patch from middle of costa to apex, extending down to vein 2, inwardly edged by a line with a dark-edged silvery-white band on it from costa to vein 2, a sinuous postmedial line with white spot on it from costa to vein 6. Hind wing purple, with dark-edged sinuous white ante- and postmedial lines, the latter with diffused fuscous on its inner edge, the outer area violaceous with some fuscous on the margin.

Hab. S. Europe, Amur; Japan, Dharmsála. Exp. 22 millim.

Genus TEGULIFERA.

Tegulifera, Saaim Ber Senck Ges 1879-80, p 305. Peucela, Rag. Ann Soc Ent Fr 1891, p 47.

Type, T. rubicundalis, Saalm, from Nossi-Bé.

Range. Neotropical region; Tunis, S. Africa; Madagascar;

India, Ceylon, and Burma; Borneo.

Palpi upturned, the 2nd joint thickly scaled and reaching vertex of head, the 3rd short, maxillary palpi minute; antennæ of male serrate and fasciculate; tibiæ moderately hairy, the spurs long. Fore wing rather long and narrow; vein 3 from before end of cell. 4,5 approximated for nearly one-third length; 7,8,9 stalked; 10,11 free Hind wing with vein 3 from angle of cell; 4,5 approximated for about one-third length, 6,7 on a short stalk.

SECT. I. (Peucela). Patagus of male not extending beyond metathorax.

4531. Tegulifera faviusalis, Wik Cat. xix, p 907. Pyralis drapevalis, Wik Cat xix, p 909 Pyralis nonusalis, Wik Cat xix, p 909 Pyralis platymitris, Butl P. Z S 1883, p 166, C & S no. 4459. Pyralis pallivittata, Moore, Lep Atk p 206, C & S no. 4456 Orthopygia atomosalis, Warr A M N H (6) xvi, p 465 Pencela rubnifuscalis, Warr A M N H (6) xvii, p 461.

Head, thorax, and abdomen pale red-brown irrorated with black. Fore wing with the basal area dark red-brown, followed by an



Fig 88 — Tegulifera famusalis, o

indistinct curved dark line; the medial area ochieous irrorated with black, a black cell-spot, the outer area dark red-brown, with a sinuous postmedial line parallel to its inner edge. Hind wing ochreous irrorated with black; subbasal and medial curved dark lines; ciha of both

wings with pale bases and pink tips

Hab. NW Himalayas, Sikhim, Margharita; Assam; Nagas; Borneo Exp, δ 24, Q 26 millim.

4532 Tegulifera pallıdıbasalıs, n sp i

Q. Differs from platymatris in being olive or pink Fore wing with the basal area concolorous, the antemedial line sinuous; the outer area olive or pink at costa and inner margin, and with no line parallel to its inner edge. Hind wing with the medial line sinuous below vein 2

Hab. Nilgiris (Hampson) Exp 24 millim. Type in B. M.

4533. Tegulifera castanealis, n sp.

Reddish chestnut Fore wing with black discocellular speck. a postmedial pale line excurved between veins 6 and 2; a marginal series of black specks, cilia black at base, crimson at tips. wing slightly irrorated with black, a marginal series of black specks, underside with pale curved submarginal line

Hab Bhután, 2500 feet (Dudgeon). Exp 28 millim Type

m B. M.

4534 Tegulifera rosealis, n sp

P Fleshy pink, palpi fuscous, tarsi banded black and white. Fore wing with the costa black with white specks on it; traces of a postmedial line, the wing irrorated with a few black scales; a marginal series of black specks Hind wing bright pink prominently irrorated with black, a curved black medial line; both wings with the cilia black with a pink line through them. Underside of fore wing with postmedial black band outwardly oblique from costa to vein 4; the apical area black

Hab Bhután (Dudgeon), Margharita, vp 16 millim Type in coll. Elwes. Assam (Doherty).

Evp 16 millim

4535. Tegulifera rufifascialis, n. sp.

d. Ochreous, antennæ blackish. Fore wing slightly suffused with flesh-pink, a rufous fascia on median nervure becoming a dark-brown wedge-shaped mark from lower angle of cell to outer margin, a slight subcostal rufous fascia and some dark specks on costa towards apex; the area at outer angle from middle of inner and outer margins dark brown with slight dark streaks above it. Hind wing slightly suffused with fuscous towards outer margin.

Hab. Nágas, 6000 feet (Doherty). Exp. 32 millim. Type in

coll. Elwes.

4536. Tegulifera subolivescens, War A. M N H (6) xvi, p. 464

J. Pale ochreous irrorated with fuscous; abdomen with black band on basal segment and black lateral bands on the next three segments. Fore wing with the basal area suffused with fuscous, leaving a pale band on inner side of the antemedial line, which is angled on median nervure, a black discoc-llular spot, a minutely dentate dark-edged pale postmedial line bent inwards at vein 2; a marginal series of dark specks. Hind wing pale, suffused with fuscous towards outer margin; a minutely dentate pale submarginal line.

The typical Khási form is more olive-green in tone. Hab. Khásis, Ceylon. Exp. 18 millim.

SECT II (Tegulifera) Patagia of male extending well beyond metathorax.

4537. Tegulifera psamathopis, Meyr Trans Ent Soc. 1894, p. 11

d. Fuscous brown irrorated with fuscous, head slightly ochreous. Forewing with the costa fuscous. Both wings with oblique fuscous postmedial line, the base of cilia rather darker than extremities.

Hab. Shan States. Exp. 26 millim.

Genus STEMMATOPHORA.

Stemmatophora, Guen Delt & Pyr. p 129 (1854) Maradana, Moore, Lep Ceyl 11, p 57 (1884) Koremalepus, Hmpsn III Het vin, p. 129 (1891)

Type, S combustales, F. R, from Europe.

Range. S Europe; S Africa, Japan; Oriental region to Celebes. Palpi upturned and reaching vertex of head, the 2nd joint fringed with hair in front, the 3rd minute; maxillary palpi minute; antennæ of male with fascicles of long cilia; tibiæ somewhat hairv, the outer spurs short. Fore wing short and broad, the apex rectangular; vein 3 from before angle of cell, 4, 5 from angle; 7, 8, 9 stalked, 10, 11 free. Hind wing with vein 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle.

SECT. I. (Stemmatophora). Male with the tegulæ hardly reaching beyond the metathorax.

4538 Stemmatophora fuscibasalis, Snell. Tyds v. Ent. xxii, p. 199; xxvi, p. 121, pl 6, figs. 3, 3 a
Pyralis umbrosalis, Swinh Trans. Ent. Soc. 1890, p. 291.

Rufous and ochreous. Fore wing dark rufous with waved antemedial pale line, with the costal and inner areas beyond it ochreous as far as the postmedial series of pale specks, which are often developed into a dentate line. Hind wing fuscous brown, with curved ante- and postmedial pale lines, the latter minutely dentate from the costa to vein 4.

Hab Formosa; Bangalore; Burma, Celebes. Exp. 24-28 millim.

4539. Stemmatophora carnealis, n sp

Pale yellowish brown suffused with pink and irrorated with fuscous; abdomen dark at extremity. Fore wing with sinuous ochreous ante- and postmedial lines expanding into spots on costa; a dark discocellular spot, the medial part of costa with black specks. Hind wing paler and yellower, with pale-edged dark curved postmedial line; a dark line at base of cilia

Hab. E. Pegu (Doherty). Exp., o 24, Q 30 millim. Type in

coll Elwes.

4540. Stemmatophora pallidella, n. sp

Pale ochreous with a slight reddish tinge and fuscous suffusion. Fore wing with the veins more or less prominently irrorated with fuscous; a dark discocellular speck; an oblique fuscous line, obsolescent and curved inwards to costa near apex, widening and often with another line inside it near middle of inner margin; a dark marginal line. Hind wing paler, with more or less developed oblique fuscous postmedial line.

Hab. Ceylon (Pole). Exp. 16 millim. Type in B. M.

4541. Stemmatophora pseudaglossa, n. sp.

o. Pale ochreous irrorated and suffused with dark purplish red. Fore wing with dark red basal patch; a sinuous antemedial line expanding into a patch at costa, a discocellular speck; a post-medial line expanding into a patch at costa, much excurved and minutely dentate beyond end of cell; a marginal series of specks. Hind wing white.

Hab. Ceylon (Pole). Exp. 14 millim. Type in B. M.

4542. Stemmatophora sanguifusa, n. sp

2. Head brownish yellow; thorax crimson, with some leadencoloured scales, abdomen ochreous, with some crimson and leaden colour at base. Fore wing olive, the costal area crimson to beyond middle, with a series of ochreous specks on costa; an antemedial black line and black discocellular spot, outer area crimson indented at vein 6. Hind wing crimson, with black antemedial and medial lines, the anal angle and cilia of both wings ochreous

Hab Ceylon (Green) Exp 24 millim. Type in B M

4543. Stemmatophora albiguttata, Warr. A M N H (6) $_{ m P}$ 496

Dark purplish red, head ochreous Fore wing with slightly sinuous antemedial white line, the medial part of costa black with white specks, a postmedial white spot from costa to vein 5, with an obscure slightly sinuous fuscous and white line from it to inner margin. Hind wing with dark-edged pale slightly sinuous ante- and postmedial lines

Hab Japan, Khásis Exp 18 millim.

4544 Stemmatophora herculialis, n sp

Q. Differs from albiguitata in being deeper purple, the head concolorous, both wings with dark ante- and postmedial lines; the cilia purple at base, golden yellow at tip; fore wing with the postmedial white spot broader at costa

Hab Nágas (Doherty) Evp 20 millim Type in coll Elwes.

4545. Stemmatophora costinotalis. n sp.

Q. Dark fuscous slightly suffused with red; both wings with the ante- and postmedial dark lines hardly traceable; fore wing with triangular white spot on costa beyond middle. Underside of hind wing with curved pale postmedial line

Hab Sikhim (Dudgeon) Exp. 20 millim. Type in B. M.

4546 Stemmatophora rivulata, Moore, Lep Ceyl. ni, p 58, pl. 150, fig 14, C & S no 1910

Vinous red irrorated with black. Fore wing with ante- and postmedial almost straight pale lines, the former with slight dark outer edge, the latter with dark inner edge; a dark cell-spot, some pale specks on middle of costs. Hind wing more fuscous, a pale curved postmedial line, both wings with a pale line at base of cilia.

Hab. Ceylon. Exp., ♂ 24, ♀ 32 millim

SECT. II (Coremalepts) Male with the tegulæ extending well beyond metathorax.

4547 Stemmatophora tactilis, Swink Trans Ent Soc. 1890, p 290. Koremalepis scopula, Hmpsn Ill Het viii, p 129, pl 154, figs 2 & 15



Fig 89.
Stemmatophora tactilis, 5. 1.

Differs from rivulata in being brighter vinous red. Fore wing without the dark cell-spot and edges to the lines. Hind wing with pale antemedial line approaching the postmedial lineat inner margin.

Hab. Sikhim; Nilgiris; Burma. Exp, & 28, \, 34 millim.

- 4548. Stemmatophora bicoloralis, Leech, Entom 1889, p. 65, pl 4, fig 17
 Pyralis dulciculalis, Swinh. P. Z S. 1889, p. 418, Hmpsn. Ill
 Het viii, pl 156, fig 13
- J. Pale pinkish brown; patagia dark at tips. Fore wing with an indistinct pale curved antemedial line with some red on its edge, a black cell-spot, some black specks on medial part of costa, a pale slightly sinuous postmedial line, with the area beyond it suffused with red. Hind wing suffused with red and slightly irrorated with black, a pale curved postmedial line.

Hab. Japan, Mahableshwar, Nilgiris. Exp. 22 millim.

4549. Stemmatophora laticineta, n. sp

Q. Head and thorax reddish ochreous, abdomen fuscous with white segmental lines. Fore wing reddish ochreous, an indistinct medial line angled to lower end of cell and with a diffused band inside it from cell to inner margin, where it is widest; some dark specks on costa; the outer third of wing fuscous with oblique inner edge. Hind wing ochreous, with indistinct medial line merged in the outer fuscous area except towards inner margin. Underside with a bright ochreous patch on costa of fore wing beyond middle.

Hab. Dharmsála (Hocking). Exp. 18 millim. Type in B. M.

- 4550. Stemmatophora monostæchalis, Warr. A. M. N. H. (6) vii, p. 497.
- Q. Fuscous black, the head and collar fulvous Fore wing with slightly curved medial white band, an indistinct postmedial ochreous spot on costa. Underside of hind wing with traces of a submarginal grey line.

Hab Dharmsála Exp. 20 millim.

SECT. III. Male with the patagia extending almost to end of abdomen

4551. Stemmatophora punctimarginalis, n sp

d Pale ochreous irrorated with black, the patagial tufts and abdomen not irrorated. Fore wing with the basal area thickly irrorated and with a vinous patch on it; a black discocellular

lunule; the medial part of costa with black and white specks, an obliquely sinuous diffused black postmedial band with obscure line parallel to its inner edge; a marginal series of black specks. Hind wing pale, traces of a subbasal oblique line, a minutely waved curved submarginal line; the marginal area thickly irrorated and with a marginal series of black specks.

Hab Bernardmyo, Burma (Doherty). Exp. 18 millim. Type in

coll. Elwes

Genus LARICE.

Larice, Rag Ann. Soc Ent Fr 1891, p. 640.

Type, L phycidalis, Guen

Range. N.W. Himalayas, Burma.

Probosons small, palpi upturned, the 2nd joint fringed with long hair in front and reaching vertex of head, the 3rd long and naked; maxillary palpi well developed and triangularly scaled, antenna of male bipectinated with short branches; tibia slightly hairy. Fore wing long and narrow; vein 3 from before angle of cell; 4, 5 from angle, 6 from below upper angle, 7, 8, 9 stalked; 10, 11 free. Hind wing with vein 3 from near angle of cell; 4, 5 from angle, 6, 7 from upper angle.

4552. Larice phycidalis, Guen Delt & Pyr p 121, C & S no 4457 Larice swinhoei, Rag Ann. Soc Ent Fr. 1891, p 640

Grey. Fore wing with the basal area red-brown with white



Fig. 90 -Larice phycidalis, &

edge, the medial area grey; the outer area pale redbrown, its inner edge oblique and nearly joining the basal red area at inner margin, a white postmedial line excurved between veins 2 and 5.

Hab Kulu; E Pegu Exp.

16 millim.

Genus TAMRACA.

Tamraca, Moore, Lep. Ceyl m, p 554 (1887)

Type, T torridalis, Led.

Range China; India, Ceylon, and Burma; Malayan subregion to Celebes.

Proboscis minute, palpi oblique, the 3rd joint porrect, thickly clothed with hair and reaching well beyond the minute maxillary palpi and sharp frontal tuft, antennæ of male with short fasciculate branches, patagia of male reaching end of metathorax, with a tuft of long hair below them, tibiæ hairy. Fore wing with the costa nearly straight, the outer margin somewhat excised towards outer angle; vein 3 from before angle of cell, 4, 5 approximated

for one-third length; 7, 8, 9 stalked, 10, 11 free. Hind wing with vein 3 from near angle of cell, 4, 5 hardly approximated at base; 6, 7 from upper angle.

4553. Tamraca torridalis, Led Wien ent Mon vii, pp 342 & 457, pl 6, fig. 15, Moore, Lep Ceyl iii, pl 215, figs. 7, 8, C & S. no 4253

Varma incerta, Will Cat xxxiii, p 829, C & S no 2213

Head brownish, thorax purplish, abdomen purplish and fuscous Fore wing brownish ochreous suffused with purplish



red at base and on inner margin, and fiery red on medial area below cell and on outer area, a curved dark antemedial line, a dark cell-spot and incurved postmedial dark line with pale inner edge. Hind wing

Fig. 91 —Tamraca torridalis, of 1.

suffused with purphsh red and fuscous on costal half and with fiery red on inner half; an antemedial yellow line from median nervure to inner margin; a triangular white spot below lower angle of cell, a postmedial line incurved from apex to vein 5, then with yellow on its edge, waved and angled to near margin at vein 2; both wings with the margin and cilia purphish fuscous. Underside much paler, with the base of both wings dark.

Hab. China, N.W. Himalayas, Nagas; Bombay, Ceylon;

Burma, Java, Celebes. Exp. 24-36 millim.

Genus HERCULIA.

Herculia, Wlh. Cat xix, p 807 (1859)
Cisse, Wlh. Cat xxvii, p 125 (1863)
Buzala, Wlh. Cat xxvii, p 129
Ocrasa, Wlh. Cat xxxii, p 1212 (1865)
Orthopygia, Rag. Ann. Soc. Ent. Fr. 1891, p 29
Dolichomia, Rag. Ann. Soc. Ent. Fr. 1891, p 30
Trichauctenia, Warr. A. M. N. H. (6) ix, p 173 (1891).

Type, H marthalis, Wlk

Range Universally distributed

Palpi thickly scaled, the 2nd joint upturned and reaching vertex of head, the 3rd porrect; maxillary palpi filiform, antennæ of male minutely ciliated, the patagia of male reaching beyond the metathorax; tibiæ moderately hairy. Fore wing with vein 3 from end of cell, 4, 5 approximated for about one-third length, 10, 11 free. Hind wing with vein 3 from angle of cell, 4, 5 approximated for about one-third length; 6, 7 stalked

The male of the section Ocrasa has a tuft of hair from the base

of fore femur.

SECT. I. (Herculia). Patagra of male reaching slightly beyond metathorax.

4554. Herculia imbecilis, *Moore, Lep. Ceyl.* ui, p. 264, C. & S. no 4450.
Pyralis uncongrua, *Butl. P. Z. S.* 1886, p. 383, pl 35, fig. 5, C. & S.

Pale olive-grey. Fore wing with the costa reddish ochreous; a slightly curved antemedial pale line and almost straight postmedial line, a dark speck at end of cell. Hind wing with nearly straight ante- and postmedial pale lines.

Hab. N.W. Himalayas, Nilgiris; Ceylon; Java; Celebes;

Fig. Exp., of 30, 9 34 millim.

4555. Herculia tenuis, Butl. P. Z S. 1880, p. 681 Spilodes rhodocryptalis, C & S no. 4145, nec Wik.

Differs from *imbecilis* in being pale reddish brown; the lines of both wings fuscous, hind wing with the antemedial line more oblique and approaching the postmedial line towards inner margin.

Hab. Brazil; S. Africa, Formosa; Poona; Ceylon. Eup. 26

millim.

- 4556. Herculia rudis, Moore, Lep. Atk. p. 205, C & S. no. 4508.
- Q. Differs from tenus in the head, thorax, and fore wing being suffused with pinkish, the antemedial line with ochreous inner edge, the postmedial with ochreous outer edge; fore wing with a dark discocellular spot and yellow specks on medial part of costa.

One specimen has the postmedial line of fore wing slightly excurved from vein 6 to 3, and the hind wing paler.

Hab. Sikhim. Exp. 30 millim.

- 4557. Herculia nigrivitta, Wik. Cat xxvn, p. 125.

 Buzala fuscicosta, Wik Cat xxvn, p. 130.

 Asopia fuscicostalis, Snell Tyd v. Ent xxvi, p. 122, pl. 6, fig. 4
- c. Pale rufous; head fuscous black. Fore wing with the costal area smoky black, with pale ante- and postmedial spots from which arise slightly waved lines, a black speck at upper angle of cell. Hind wing slightly irrorated with fuscous and with the inner area darker rufous; slightly waved dark ante- and postmedial lines.

Hab. Burma; Borneo. Exp. 26 millim.

- 4558. Herculia albelinealis, Hmpsn Ill Het vm, p 130, pl 154, fig 10.
- 2. Black-brown slightly irrorated with grey and red scales Fore wing with some black and white specks on costa; a slightly

sinuous oblique white antemedial line; a postmedial white line excurved between veins 6 and 2. Hind wing with indistinct white ante- and postmedial sinuous lines; both wings with a white line at base of cilia.

Hab. Nilgiris. Exp. 20 millim.

- 4559. Herculia aurocilialis, Hmpsn. Ill. Het vini, p. 180, pl. 154 fig 19
- Q. Dark purplish brown, with the red ground-colour only faintly showing in places. Fore wing with ante- and postmedial indistinct dark lines approaching each other towards inner margin of hind wing, cilia bright golden yellow.

Hab. Nilgiris. Exp. 36 millim.

- 4560. Herculia ochreicilia, Hmpsn. Ill Het. viii, p 130, pl. 154, fig. 3.
- c. Dark vinous brown; hind wing dark red; both wings with fine waved ante- and postmedial white lines; some pale specks on costa of fore wing; cilia very pale yellow.

 Hab. Nilgiris. Exp 22 millim.
- 4561. Herculia pernigralis, Rag Ann Soc. Ent. France, 1891, p. 32.
- J. Very dark purplish red; abdomen tinged with ochreous towards extremity, both wings with indistinct dark, slightly sinuous ante- and postmedial lines nearly meeting on inner margin of hind wing, the latter arising from an ochreous spot on costa of fore wing, on which also are some ochreous specks between the two lines, an obscure discocellular lunule; the cilia of both wings ochreous. Underside with postmedial grey-edged line. Tarsi ochreous.

Hab Ceylon; Rangoon. Exp. 14 millim.

4562. Herculia marthalis, Wik Cat xvii, p 270

Herculia bractealis, Wik Cat xix, p 808, Hmpsn Ill Het. ix,
pl 172, fig 2, C. & S no 4512.

Scarlet suffused with pink. Fore wing with slightly curved antemedial fuscous lines and sinuous postmedial line; some yellow specks on medial part of costa, often expanding into spots at the origin of the lines. Hind wing redder, with antemedial and medial fuscous lines approaching each other towards inner margin, cilia of both wings golden yellow.

Some specimens are more or less completely suffused with fuscous. Hab Ceylon, Borneo. Exp., 3 24-30. Q 30-36 millim.

4563 Herculia ignifiualis, Wlk Cat. xvii, p 268, Hmpsn Ill. Het.
ix, pl. 172, fig 10, C & S no 4513
Pyralis doreasalis, Wlk Cat xvii, p 271.
Pyralis healealis, Wlk Cat. xix, p. 902.
Vol. iv.

Differs from marthabs in being suffused with brown, the



Fig 92 — Heroulia ignificalis, d

costs and outer margin of fore wing and the hind wing pinkish; the ante- and postmedial lines industrient, the latter with pale outer edge, fore wing with dark cell-speck.

Hab. Nilgiris; Ceylon, Borneo. Exp 22-24 millim.

4564. Herculia suffusalis, Wik. Cat. xxxiv, p 1285, C & S no 4466.

Differs from *ignificates* in being purplish fuscous; the anal tuft orange; wings with the lines almost obsolete and with large yellow spots at their origin on costs of fore wing.

Hab. Sind; Poona; Calcutta; Rangoon Exp 26 millim.

SECT. II. (Dollchomia). Patagia of male reaching far beyond the metathorax

4565. Herculia dharmsalæ, Butl Ill Het vii, p 92, pl 134, fig 13

Head and thorax pale reddish brown; abdomen fuscous; the anal tuft rufous. Fore wing with the basal area rufous, bounded by a straight white line, the medial area pale brown, with minute dark cell-speck and specks on costa, and bounded by a white line which is slightly bent inwards at vein 4, the area beyond it rufous. Hind wing pale fuscous, with indistinct white medial line, the area beyond it slightly tinged with rufous; a pale line at base of cuba.

Hab. Dharmsála. Exp., o 22, 2 26 millim.

4566. Herculia fuscalis, Hmpsn. Ill. Het. vin, p 128, pl 154, fig 5

2. Greyish brown irrorated with fuscous, wings irrorated with red scales. Fore wing with the base of costa blackish; an indistinct pale antemedial line angled below costa; an indistinct cell-spot, a pale sinnous postmedial line bent inwards below vein 2. Hind wing with indistinct pale antemedial line; both wings with pale line at base of cilia.

Hab. Nilgiris Exp. 20-24 millim

4567. Herculia sericea, Warr A. M. N. H. (6) vu, p 499.

d. Brownish grey; head reddish. Fore wing slightly irrorated with fulvous; the costs pink, with some pale specks at middle, nearly straight fulvous ante- and postmedial lines, a fulvous cell-spot. Hind wing whitish; traces of an oblique antemedial line from discocellulars to inner margin, a slightly curved fuscous postmedial line, the outer area slightly irrorated with fuscous; both wings with a dark marginal line.

Hab Sikhim Exp, & 30-32, \$\, 44 \text{ millim.}

Genus EURYZONA, nov.

Type, E latifascia, Hmpsn.

Range W. India.

Palpi upturned and somewhat oblique, reaching beyond the sharp frontal tuft, the 2nd joint thickly scaled; maxiliary palpi fillform; antennæ of male ciliated, the basal joint dilated; thin of male with the outer spurs short. Fore wing with the apex rounded, the inner margin lobed near base; vein 3 from near angle of cell; 4, 5 well separated; 6 from upper angle; 9 given off from 8 before 7; 10, 11 free Hind wing with vein 3 from near angle of cell; 4, 5 well separated, 6, 7 from upper angle.

4568. Euryzona latifascia, Hmpsn. Ill. Het vui, p 129, pl 154, fig. 8

Grey suffused with brown; abdomen irrorated with black. Fore wing with the base of costa and lobe of inner margin

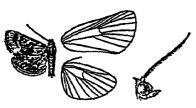


Fig 93 —Euryzona latifascia, d

mrorated with black in male; an antemedial black line angled on median nervure and bent outwards below vein 1; a postmedial line angled outwards on vein 5 and inwards on vein 2, the area between the two lines irrorated with black, with a prominent black discocellular spot and pale

specks on costa, a series of black marginal specks. Hind wing fuscous, with traces of cell-speck and curved medial line, which are more prominent on underside; a black line through base of cilia.

Hab. Mahableshwar; Nilgiris. Exp., ♂ 22, ♀ 24 millim.

Genus RHYNCHOPYGIA, nov.

Type, R. purpureorufa, Hmpsn.

Range. Ceylon.

Palpi oblique and thickly scaled, the 3rd joint porrect; maxillary palpi minute and filiform, a slight frontal tuft; antennæ of male minutely serrate and fasciculate; this slightly hairy. Fore wing with vein 3 from near angle of cell; 4, 5 from angle; 9 given off from 8 before 7. Hind wing with vein 3 from near angle of cell, 4, 5 from angle, 6, 7 from upper angle.

4569. Rhynchopygia purpursorufa, n. sp.

J. Dark purple-red; vertex of head and base of abdomen



Fig 94

Bhynchopygia purpureorufa, 6

yellowish. Fore wing with large orange ante- and postmedial spots on the costa, from which arise sinuous lines which are sometimes interrupted. Hind wing with irregularly sinuous antemedial and medial orange lines conjoined below cell; both wings with the margin dark purple, the cilia orange.

Hab. Hambantota, Ceylon (Pole). Exp. 16 millim. Type in B. M.

Genus TRIPHASSA.

Triphassa, Hubn. Samml exot Schmett 1, p 26 (1818).

Type, T. stalacutis, Hubn, from S. Africa.

Range S. Africa, India; Ceylon.

Palpi oblique, the 2nd joint thickly scaled, the 3rd porrect and minute, maxillary palpi filiform, a sharp frontal tuft, antennes of male with a slight process at end of basal joint, the shaft set on at an angle and with very long cilia, mid tables fringed with hair. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 10, 11 free. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle

SECT. I Patagia of male bearing long tufts of scales reaching to middle of abdomen.

4570 Triphassa ochrealis, Hmpsn. Ill. Het ix, p 158, pl 171, fig 5.

Ochreous brown, male with a tuft of black scales at end of patagin, abdomen with some black before the anal tuft. Fore wing slightly irrorated with fuscous, some pale and dark specks on costa, a pale slightly curved antemedial line; a minutely dentate postmedial oblique line angled inwards below vein 2, the area between the two lines pale fuscous; a series of black marginal strike. Hind wing paler with a slight reddish tinge, a fuscous minutely dentate medial line from veins 6 to 2, with traces of a line beyond it, some black specks on margin and a black line through the cilia.

Hab. Ceylon. Exp. 20 millim.

4571. Triphassa metaxantha, n sp

6. Differs from ochrealis in the head, thorax, and fore wing being olive in tone, hind wing reddish orange; postmedial line of both wings evenly curved, cilia rufous.

Hab. Ceylon (Yerbury) Exp. 24 millim. Type in B. M.

1

4572. Triphassa vulsalis, Wlk. Cat xviii, p 671; Hmpsn. Ill Het. ix, pl. 171, fig 9, C. & S no. 4510.

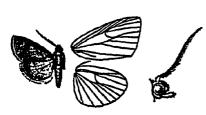


Fig 95—Triphassa vulsalis, d. 🚦

Differs from ochrealis in the head, thorax, and fore wing being dull pink, mid tarsi pure white. Fore wing with the ante- and postmedial lines dark, the latter not dentate or angled below vein 2, the area between them not dark; a black speck at end of cell. Hind wing with curved postmedial line;

the marginal area suffused with pink. Hab. Ceylon. Exp 16 millim.

- 4573. Triphassa imbutalis, Wild Cat xxxiv, p 1283, Moore, Lep. Ceyl in, pl 178, fig 9, C. & S no 4351.
- 2. Bright pink; the palpi orange; abdomen and hind wing straw-yellow. Fore wing with pale and dark specks on the costa; nearly straight ante- and postmedial dark lines; a dark cell-speck and marginal line.

Hab. Ceylon. Exp. 18 millim.

4574. Triphassa luteicilialis, n. sp.

Q. Purplish red, anal tuft bright pink; wings irrorated with black. Fore wing with antemedial and postmedial pale and dark lines excurved at middle; a series of yellow specks on medial part of costa; a black discocellular spot. Hind wing with antemedial and medial pale and dark sinuous lines, both wings with the outer area rather darker; a black marginal line; the cilia golden yellow. Hab Ceylon (Pole). Exp. 24 millim. Type in B M.

SECT. II. Patagia of male not reaching beyond the metathorax.

A Mid tibiæ of male moderately fringed with hair.

4575. Triphassa zeuxoalis, Wik. Cat. xxvii, p 135, C & S no. 4718 (part)

Dark purplish rufous suffused with fuscous; male with the anal tuft white, the lateral tufts black. Fore wing with the costal and basal areas dark greyish fuscous; an oblique white line from end of cell to inner margin, expanding at end of cell into a pyriform white mark pointing towards outer margin; one or two white specks beyond upper angle of cell sometimes developed; a sinuous white postmedial line. Hind wing fuscous with traces of a postmedial line; both wings with a white line at base of cilia.

Hab. Ceylon. Exp. 16 millim.

- 4576. Triphassa xylinalis, Swinh P. Z. S. 1885, p 865, pl. 57, fig. 17; C. & S no 4471.
 - d. Differs from zeuzoalis in being more uniform fuscous black:

no pyriform mark on fore wing, the postmedial line almost obsolete except for a pale spot on costa; the line at base of citia indistinct.

2 with the oblique line on fore wing ochreous.

Hab. Campbellpur, Poona, Ceylon. Exp, o 12, ♀ 14 millim.

B. Mid tibia of male fringed with very long hair on inner side.

4577. Triphassa bilmeata, Moore, Lep. Ceyl 11, p 555, pl 215, fig 11; C & S. no 4511.

Comaria unilinealis, Warr A M. N. H (6) xvii, p 462

Pinkish rufous slightly irrorated with black. Fore wing with indistinct pale curved antemedial line, the medial area slightly paler, with a black cell-speck and some specks on costa; a slightly outwardly-oblique postmedial pale line with the area beyond it darker. Hind wing with nearly straight ante- and postmedial pale lines, the basal and outer areas darker than the medial; both wings with a fine pale line at base of cilia, which are almost white except at base.

Hab. Mussooree; Ceylon. Exp. 20 millim.

Genus RHYNCHETERA, nov.

Type, R. carnealis, Hmpsn.

Range. Assam

3. Palpi porrect, downcurved at extremity and extending rather more than twice the length of head, the 2nd joint fringed with hair above and below; maxillary palpi dilated with hair, frons with a sharp tuft; antennæ serrate and fasciculate; hind tabiæ fringed with long hair, the 1st joint of tarsi with a large tuft of hair on outer side. Fore wing with the apex rectangular; vein 3 from well before end of cell; 4, 5 from angle, 6 from upper angle, 10 from cell. Hind wing with vein 3 from before angle of cell, 4, 5 from angle

2 with the palm upturned and naked, the 2nd joint curved.

and reaching far above vertex of head.

4578. Rhynchetera carnealis, n sp

Flesh-colour arrorated with black. Fore wing with nearly



Fig 96.—Rhynchetera carnealis, 5 1

straight ante- and postmedial dark lines Hind wing paler, with the ante- and postmedial lines meeting at inner margin.

Hab. Nágas (Doherty) Eap, d 24, 2 34 milim. Type is

coll. Elwes.

Genus HYBOLOMA.

Hyboloma, Rag Ann Soc Ent Fr. 1891, p 99.

Type, H. nummosalis, Rag.

Range Assam, Burma, Borneo.

Palpi porrect, extending about four times length of head, curving downwards and inwards, the 2nd joint fringed with hair below, the 3rd rounded and fringed above and below; maxillary palpi large and triangularly scaled; frons with a sharp tuft; antennæ nearly simple; tibæ smoothly scaled. Fore wing with the costa highly arched before middle, excised beyond it, the apex produced and depressed, the outer margin excised below apex, excurved and somewhat angled at middle; vein 3 from before angle of cell 4, 5 from angle, 6, 7, 8, 9 stalked; 10, 11 free. Hind wing with the outer margin slightly excised below apex; vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle.

4579 Hyboloma nummosalis, Rag. Ann Soc Ent Fr 1891, p. 99, pl 16, fig 3

Pale greyish rufous, palpi tinged with fuscous. Fore wing



Fig 97 —Hyboloma nummosalis, ♀

with indistinct diffused rufous antemedial band, angled below median nervure, then broader; a black discocellular speck; a diffused fuscous submarginal band, dentate inwards on veins 5 and 2, and with series of indistinct grey spots on

it, the area beyond it darker rufous except at outer angle. Hind wing suffused with fuscous, an indistinct submarginal fuscous line angled on vein 2. Underside of fore wing and costal half of hind wing much redder, both wings with black discocellular specks.

Hab. Khásis, Shán States; Borneo. Exp. of 27, 2 32 millim.

Genus OMPHALOCERA

Omphalocera, Led Wien ent Mon 1863, p 339 Omphalomia, Swinh A M N H (6) xiv, p. 140 (1894).

Type, O carrosa, Led, from N. America

Range N America, N.E and W. India; Burma

Palpi porrect, downcurved, thickly clothed with hair, and reaching well beyond the filiform maxillary palpi and sharp frontal tuft; antennæ thickened, tibiæ slightly hairy; abdomen with dorsal tufts. Fore wing broad, with the costa arched near base and towards apex, which is rounded, male with a large fold on underside at base of costa fringed with long hair, yein 3 from before angle of cell; 4, 5

from angle; 10, 11 free. Hind wing with vein 3 from near angle of cell, 4, 5 from angle, 6, 7 stalked

In the typical section the male has a sinus and vesicular tuft of

scales on shaft of antennæ.

4580. Omphalocera accersita, Swinh. A. M N. H (6) xiv, p 140

Dark rufous suffused with black, palpi black, abdomen yellowish towards extremity. Fore wing suffused with fuscous black, an indistinct minutely dentate subbasal black line; an antemedial line highly angled to lower angle of cell and with more



Fig 98 — Omphalocera accersita, Q

or less pale rufous between it and the subbasal line, a discocellular black lumule; a postmedial curved series of black specks and rufous strise on the veins; the apical area suffused with rufous. Hind wing fuscous, with traces of postmedial and submarginal curved lines.

Hab. Bhután; Khásis; Khandála Ewp., & 36, 9 44 millim

4581. Omphalocera canosparsalis, n sp

Q. Head, thorax, and fore wing clothed with rufous, black, and grey scales, abdomen brown suffused with rufous. Fore wing with traces of two dark sinuous antemedial lines, a ferruginous spot with pale edges on discocellulars, a very indistinct minutely dentate double postmedial line bent outwards between veins 5 and 2. Hind wing fuscous, both wings with slight dark marginal specks; the cilia pinkish. Underside of hind wing with traces of double curved minutely dentate postmedial line.

Hab. Bernardmyo, Burma (Doherty) Exp 40 millim. Type

in coll. Elwes.

Genus TOCCOLOSIDA.

Toccolomda, Wik. Cat xxvii, p 14 (1863)

Type, T_rubriceps, Wlk.

Range. E Himalayas; Assam; Borneo

Differs from Sacada in the palpi being smoothly scaled, the frons rounded; the antennæ minutely fasciculate and without the tuft on basal joint, male with tufts of long hair arising from beneath the patagia; tibiæ and tarsi slightly fringed with hair; the spurs minute. Fore wing narrow; the outer margin with traces of angulation at vein 4. Hind wing with veins 4, 5 approximated at base.

4582. Toccolosida rubriceps, Wik Cat xxvii, p. 14, C. & S. no. 4780.

Head, thorax, and base of abdomen bright crimson above; abdomen and fore wing dark fuscous with slight red suffusion, the latter with the costa greyish towards apex, an oblique grey line from origin of vein 2 to inner margin before middle and a similar

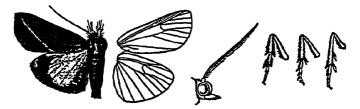


Fig. 99.—Toccolosida rubriceps, &. 1.

line from apex to middle of inner margin. Hind wing bright golden yellow; the costal, apical, and anal areas dark fuscous. Underside with the inner two-thirds of fore wing grey except at outer angle, vein 2 remaining dark.

Hab. Sikhim; Bhután; Khásis, Nágas; Borneo. Exp., &

34-40, 9 44 millim.

Genus SACADA.

Sacada, Wlk Journ Lunn Soc vi, p 136 (1862). Sybrida, Wlk Cat xxxii, p 465 (1865). Paravetta, Moore, P. Z S 1865, p 814 Danaka, Moore, Lep Atk p. 71 (1879). Xestula, Snell Rom Mém 11, p 195 (1885).

Type, S decora, Wlk, from Borneo.

Range Amur, Japan; India, Ceylon, and Burma, Borneo.

Palpi porrect, fringed with long hair below, and hardly reaching beyond the sharp frontal tuft, antenne with a tuft of hair from the basal joint, tibie and proximal joints of hind tarsi fringed with long hair, male with a tuft of long hair from thorax below the base of fore wing. Fore wing long and narrow, the apex somewhat produced and outer margin oblique; veins 4, 5 usually stalked, 7, 8, 9 stalked; 10, 11 free. Hind wing ample; veins 4, 5 usually on a short stalk; 6, 7 from upper angle

SECT I. Antennæ of male bipectinated with long branches to three-fourths length.

A. (Sacada) Fore wing of moderate breadth, the outer margin evenly curved, female with veins 4, 5 of both wings approximated at base

4583. Sacada mordinata, Wlh Cat xxxII, p 466, C & S no 1114. Datanoides approximans, Leech, P Z S 1888, p 636, pl 32, fig. 4

Rufous. Fore wing with a diffused ferruginous patch in interno-median interspace, a medial fuscous line highly angled

and touching at vein 2 the straight oblique postmedial line, which has some ferruginous beyond it; a ferruginous line on discocellulars. Hind wing browner, with traces of dark postmedial line Underside rufous, with diffused dark postmedial line on both wings

Hab. Japan; Sikhim. Exp, & 46, Q 52 millim.

4584. Sacada unilinealis, n sp

d. Head, thorax, and abdomen pale rufous irrorated with fuscous, the fringe of hair on fore and mid tibise blackish; the tufts on hind tibise and tarsi tipped with black. Fore wing pale flesh-colour, the base of costa tinged with fuscous, two black discordal specks, an indistinct evenly curved postmedial line, the area beyond it darker flesh-colour. Hind wing pale, with faint traces of a curved postmedial line.

Hab. Sikhim (Moller). Exp. 34 millim. Type in coll. Elwes.

B. (Paravetta) Fore wing narrow.

- 8. Fore wing with the outer margin very slightly angled at vein 4.
- 4585. Sacada constrictalis, Rag. Ann Soc Ent Fr 1891, p 75, & 1890, pl. vm, fig. 10
- J. Differs from sikkima in the medial area of fore wing being more ochreous with two discoidal specks, the postmedial line nearly erect from costs to vein 5, where it is much less angled. Hind wing more uniform pale fuscous. Cilia of both wings ochreous, with two black lines through them.

The specimen from Ceylon has a black submarginal patch on

vein 2 of hind wing.

Hab Upper Assam; Ceylon. Exp. 24 millim.

4586. Sacada discinota, Moore, P.Z.S. 1865, p 814, pl. 43, fig. 8; C & S no 1158.

Head, thorax, and abdomen dark purplish rufous. Fore wing paler rufous, a bright ferruginous patch below base of cell; a



Fig 100 - Sacada discinota, 3 1

pale antemedial line highly angled in internomedian interspace, with ferruginous in its angle, and outwardly edged with fuscous: a similar postmedial line highly angled at vein 4 and with fuscous-

BACADA. 171

on its inner edge, the area between the two lines pinkish with oblique ferruginous reniform spot; a ferruginous patch on costal area beyond the postmedial line. Hind wing pale with an orange tinge, the margin and cilia redder, traces of a waved submarginal line from vein 2 to inner margin.

Hab. Sikhim; Nágas. Exp, & 32-40, & 36-46 millim

4587. Sacada pallescens, n sp

J. Pale rufous. Fore wing with dark irroration, a purplishrufous spot below base of cell conjoined to a larger patch on inner
margin; the antemedial line evenly curved, a speck on discocellulars, the postmedial line slightly curved below costa, then
oblique to inner margin, and with some fuscous suffusion beyond
it; cilia dark at tips. Hind wing ochreous, with indistinct evenly
curved dark postmedial line crossed by a rufous streak on vein 2.
Underside ochreous, with rufous suffusion on basal half of costa
of fore wing; both wings with curved postmedial line.

I much redder; the hind wing bright rufous, the patch on

basal area of fore wing bright chestnut

Hab. Sikhim; Bhután (Dudgeon). Exp, & 34, Q 44 millim. Type in B. M.

- 4588 Sacada flexuosa, Snell Trans Ent Soc 1890, p. 558
 Sacada inflammealis, Rag. Ann Soc Ent Fr 1891, p. 75, & 1890, pl viii, fig 9
- Jenous red suffused with fuscous. Fore wing with the basal area darkest; the lines dark, the first line medial, curved and sinuous, two specks on discocellulars, the second line oblique and straight, with slight trace of angulation at vein 5, approaching the medial line towards inner margin and with a large yellow patch beyond it from costa to vein 5, forming obscure lunules by the veins on it being streaked with fuscous. Hind wing much paler, with an indistinct curved postmedial line. Underside yellower

Q much redder, especially the hind wing. Hab. Sikhim, Khásis; Tavoy. Exp, & 32, Q 42 millim.

b. Fore wing with the outer margin more produced and angled at vein 4.

4589. Sacada sikkima, Moore, Lep Ath. p. 70, C & S. no 1159.

Dark purplish fuscous. Fore wing with a dark rufous oblique band from the cell near base to the inner margin at the antemedial line, which is pale, very highly angled in internomedian interspace, and with dark rufous on its inner edge from the angle to inner margin; a pale postmedial line sinuous and with dark rufous beyond it from the costa to vein 5, where it is angled, then very

oblique to unner margin; the outer area darker purplish. Hind-wing paler and browner, a pale slightly waved submarginal line from veins 1 c to 5.

Hab. Sikhim. Exp., & 34, 9 48 millim.

- SECT. II. (Danaka). Antennæ of male serrate and fasciculate; fore wing narrow, with the outer margin evenly curved,
- 4590. Sacada pyraliformis, Moore, Lep Atk. p. 71, pl. 8, fig 10, C & S. no 1210
- 3. Dull olive-green. Fore wing with obscure leaden-coloured patch on base of inner margin, a medial leaden band wide at costa, narrowing to inner margin, and with an olive-green cell-spot on it; outer area rather paler. Hind wing greenish fuscous, with indistinct pale submarginal line angled at vein 2, cilia of both wings chequered with fuscous. Underside with the basal area suffused with fuscous as far as the slightly sinuous diffused postmedial line.

Hab. Sikhim; Bhutan. Exp 32 millim

- 4591. Sacada rufina, n. sp.
- 6. Pale rufous. Fore wing with indistinct outwardly oblique antemedial and inwardly oblique postmedial slightly sinuous dark lines. Hind wing yellowish, redder towards outer margin, and with faint traces of a postmedial dark line, which is more prominent on underside.

Hab. Bombay (Leth) Exp. 30 millim. Type in B M.

Genus PARACTENIA.

Paractenia, Rag Ann. Soc Ent. Fr. 1891, p 642.

Type, P. rubicundalis, Swinh. Range Assam, W. India

Differs from Bostra in the antennæ of male being bipectinated for about two-thirds length, each wing with veins 4, 5 approximated for about one-third length; or fore wing with veins 4, 5 stalked.

SECT. I. Fore wing with veins 4, 5 approximated.

4592. Paractenia rubicundalis, Swinh P Z S 1885, p 864

Head, thorax, and fore wing bright pink, the last with an indistinct sinuous slightly oblique antemedial line, a minutely waved postmedial line angled inwards at vein 2. Abdomen pale pinkish. Hind wing pale slightly irrorated with fuscous, both wings with minute marginal series of specks.

Hab. Karáchi; Poona. Exp. 26 millim

4593. Paractenia quisqualis, Swinh P.Z S 1885, p 865, pl.57, fig. 11, C. & S no 4461.

d. Rufous brown irrorated with black. Fore wing with

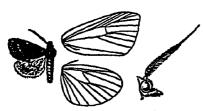


Fig 101 —Paractenia quisqualis, d. ?

waved ante- and postmedial lines approaching each other below cell; the area between them fuscous black, a black cell-spot. Hind wing ochreous, with traces of a medial line, slight fuscous suffusion towards outer margin; both wings with a prominent series of black marginal specks.

Hab Poona. Exp 20 millim.

4594. Paractenia ruptilinealis, Warr A M. N. H. (6) XVI, p 466

Q. Head, thorax, and abdomen pale rufous. Fore wing with the basal area dark chocolate bounded by a pale sinuous line; the medial area pale rufous bounded by an oblique pale-edged dark slightly sinuous line, some pale specks on costa; outer area chocolate, a pale line at base of cilia. Hind wing pale, with curved dark postmedial line, the outer area slightly suffused with fuscous, a dark marginal line and dark line through the cilia.

Hab Khásis. Exp. 20 millim.

SECT. II. Fore wing with veins 4, 5 stalked

4595 Paractenia semiochrea, Warr A M N H (6) xvi, p 466

Q. Head, thorax, and abdomen rufous Fore wing deep purplish red irrorated with black; pale sinuous black edged ante- and postmedial lines; a black discocellular speck, a pale line at base of cilia, which are dark Hind wing otherous, with traces of curved dark medial line, the outer area suffused with fuscous; a pale line at base of cilia

Hab. Khásis. Exp. 22 millim.

Genus PROSARIS.

Prosans, Meyr. Trans Ent Soc 1894, p 12

Type, P pernigralis, Meyr. Range N E Iudia, Burma

Palpi curved downwaids, more than twice the length of head, and thickly scaled, maxillary palpi dilated with scales and well developed. a large frontal tuft, proboscis small; antennæ of male with long cilia, tibiæ and proximal joints of tarsi fringed with hair, fore femora with a tuft of hair below. Fore wing somewhat narrow, the apex produced and outer margin oblique, veins 4,5 not approximated towards origin. Hind wing with vein 3 from near angle of cell, 6,7 from upper angle, male with a tuft of

long scales on middle of vein 1 c on upperside, and a bladder-like swelling at base of vein 8 below.

4596. Prosaris pernigralis, Meyr Trans. Ent. Soc. 1894, p. 12 (nec. Ray.)

d Dark purplish rufous, the vertex of head, thorax, and abdomen paler rufous Fore wing with some rufous below the



Fig 102 -Prosaris pernigralis, &

cell and vein 2, the costal area suffused with bright ferruginous from upper angle of cell to apex, a pale spot on the costa before apex. Hind wing with a large black tuft on middle of vein 1 c; a large bright ferruginous patch beyond lower angle of cell diffused outwards to the margin. Underside with the pale spot and ferruginous suffusion on costa of fore wing prominent, both wings with traces of a pale curved submarginal line

Hab Sikhim, Nágas, Rangoon, Shán States. Exp 20 millim.

Genus TREBANIA.

Trebama, Rag Ann Soc Ent Fr 1891, p 645

Type, T flavifrontalis, Leech, from China Range China, N.E India.

Proboscis well developed, palpi with the 2nd joint slightly



Fig 108 — Trebania muricolor, &

curved upwards, the 3rd rostriform, downcurved, about three times the length of head, and with a thick fringe of downcuived indescent hair springing from a groove on innerside, maxillary palpi minute, antennæ

of female nearly simple, tibes moderately hairy. Fore wing short and broad, vein 3 from before angle of cell; 4, 5 from angle, 6 from upper angle; 10, 11 free Hind wing with vein 3 from before angle of cell, 4, 5 from angle, 6, 7 shortly stalked.

4597. Trebania muricolor, n. sp.

d. Uniform mouse-brown; back of head with a slight fulvous tinge. Fore wing with traces of outwardly-oblique antemedial dark line, a speck at end of cell; a postmedial dark line highly

excurved from below costa to vein 4 Underside of hind wing with traces of postmedial line

Hab. Sikhim (Dudgeon), Nágas (Doherty) Exp 32 millim Type in B M.

Genus BOSTRA.

Bostra, Will Cat xxvii, p 123 (1863) Scotomera, Butl P Z S 1881, p 622 Megalomia, Rag Ann Soc Ent Fi 1891, p 35 Comaria, Rag Ann Soc Ent Fr 1891, p 639 Paredra, Snell Midd-Sum iv (1), 8, p 60 (1892)

Type, B illusella, Wik

Range Neotropical and Ethiopian regions · Japan; Oriental

region

Palpi thickly clothed with hair, porrect, and the 3rd joint curved downwards, maxillary palpi filiform; a sharp frontal tuft usually present antennæ of male serrate and fasciculate, tibiæ moderately hairy. Fore wing usually short and broad; veins 3 and 5 from near angle of cell, 10,11 free. Hind wing with vein 3 from before angle of cell, 4,5 from angle, 6,7 from upper angle.

SECT I Antennæ of male with strong serrations, fore wing narrow

4598. Bostra imperatrix, Warr A M N H (6) xvii, p 462

d Head and thorax very deep red-brown, frons and palpi whitish, abdomen tinged with orange. Fore wing very deep red-brown mixed with black scales, and with a diffused fiery-orange streak in internomedian interspace, and red suffusion between veins of outer area, the costal area dirty white, with some black specks on costa to near apex, indistinct antemedial and oblique postmedial lines defined by whitish below the cell. Hind wing fiery orange, the outer area suffused with red; an oblique postmedial line obsolete except beyond lower angle of cell and near anal angle, the cilia and a marginal line deep red.

Hab Sikhim; Khásis Exp 32 millim

4599 Bostra pallidicosta, Hmpsn Ill Het. ix, p 158, pl 172, fig 17.

d Bright rufous, head brownish, thorax with the scales tipped with grey. Fore wing with the scales slightly grey-tipped; the costal area grey to near apex; diffused purplish fuscous ante-and postmedial lines, the former angled on median nervure and connected by a streak with the oblique postmedial line; a dark cell-speck. Hind wing pale, suffused with fiery red towards outer margin; a slightly curved rufous postmedial line.

Hab Sikhim, Ceylon. Exp. 32 millim.

SECT. II. Antennæ of male with the serrations minute.

A. Fore wing narrow.

- 4600. Bostra subustalis, Led. Verh 2001.-bot. Ges. Wien, 1855, p 213, pl 8, fig 10
- J. Pale ferruginous. Fore wing with indistinct oblique antemedial darker line with pale inner edge; a cell-spot; a postmedial line excurved from costa to vein 4 and with pale outer edge, some dark and pale specks on costa. Hind wing with curved postmedial line with pale outer edge; both wings with the cilia dark at tips.

Hab. Dharmsála. Exp 22 millim.

B. Fore wing broad.

a. (Bostra). Patagra in male not extending beyond metathorax.

a'. Frons with a sharp tuft.

4601. Bostra marginata, Wik. Cat. xxxii, p 991.

Paleca rufescens, Butl A. M N H (5) 1v, p 354.

Pyralis assamica, Moore, Lep Ath p 205, pl 7, fig 5, C & S.

no 4441.

Varies from greyish brown to rufous irrorated with fuscous. Fore wing with the basal area dark and bordered by a slightly curved line, a dark cell-spot, a pale curved postmedial line incurved below vein 4, the area beyond it dark. Hind wing pale; traces of an antemedial line; a slightly curved pale postmedial line with the area beyond it dark.

The Manipur race is large and richly coloured.

Hab Japan, Assam; Manipur; Moulmein, Nilgiris; Borneo. Exp., of 28-36, Q 32-44 millim.

4602. Bostra vibicalis, Led Wien. ent Mon. vii, p. 338, pl. 7, fig 4, C & S no 4509

Pyralis roborealis, Swinh. P Z S. 1885, p. 865, pl 57, fig. 1;

C & S no 4464

Euchta fortis, Butl Ill Het vii, p 92, pl 134, fig. 14

Stemmatophora foliata, Swinh. P. Z S 1889, p. 418, pl 44, fig. 5

Varies from grey-brown irrorated with fuscous to bright rufous and dark purplish fuscous. Fore wing with blackish or pale dark-



Fig. 104.—Bostra vibralts, d. 1 antecurved lines, which meet at inner margin.

edged ante- and postmedial lines, the former sinuous and sometimes bent outwards near inner margin, the latter excurved from costa to vein 4, then incurved; a dark cell-spot Hind wing with dark ante- and postmedial slightly

BOSTRA. 177

Some specimens have the area between the lines of fore wing fuscous

Hab NW. Himalayas, Bombay; Ceylon, Rangoon. Exp 34 millim.

4603. Bostra salmo, *Hmpsn Ill Het* vm, p 128, pl 154, fig 18 (2), ιd. ιx, p 157, pl 171, fig 6 (δ)

Differs from *vibicalis* in the palpi being larger, especially in the male. Wings rufous brown in male, bright salmon-colour in female, fore wing with the antemedial line straight, the post-medial line nearly straight.

Hab. Nilgiris; Ceylon Exp., & 40, 2 42 millim.

4604. Bostra astigma, Hmpsn Ill Het 1x, p. 157, pl 171, fig 12

Q. Differs from *vibicalis* in being dark rufous. Fore wing with pale nearly straight ante- and postmedial lines, with the area between them rather darker; no dark cell-spot. Hind wing with the lines pale and much closer together; cilia of both wings white at tips

Hab. Ceylon Exp 40 millim

4605. Bostra denticulata, Swinh Trans Ent Soc. 1890, p. 290, pl. 8, fig 7.
Stemmatophora duplicata, Warr. A. M N H (6) vii, p 437

Q Dark grey-brown or rufous irrorated with fuscous. Fore wing with traces of dark irregular antemedial line; a dark cellspot; a slightly curved dark pale-edged minutely dentate postmedial line. Abdomen and hind wing pale, the latter irrorated with brown towards the margin.

Hab. Burma Exp. 32 milhm.

4606. Bostra igneusta, Sonnh A M. N H (6) xvi, p. 300.

J. Head and thorax fiery red. Fore wing yellow, thickly irrorated with fiery red and sparsely with black; the costal area darkest; a black speck on discocellulars; an oblique slightly curved dark postmedial line; cilia brown at tips. Hind wing yellow, slightly suffused with red and black.

Hab. Khásis Exp. 22 millim

- 4607. Bostra illusella, Wik. Cat xxvii, p. 123, Hmpsn. Ill Het. ix, pl 172, fig 19, C & S. no. 4525
- Q. Pale fuscous brown with a slight fulvous tinge Fore wing with curved white antemedial line and sinuous postmedial line. Hind wing with traces of curved postmedial line, which is more distinct on underside

Hab Ceylon. Exp 16 millim. you iv.

4608. Bostra gnidusalis, Wlk Cat xvn, p 278, C & S no. 4502 Scotomera tristis, Butl P Z S 1881, p 623, C & S no 4531.

Fuscous grey, head ochreous Fore wing with indistinct pale antemedial line slightly bent inwards at costa; a pale postmedial line incurved below vein 4; indistinct pale specks on costa between the two lines and a dark cell-speck. Hind wing with faint traces of submarginal line.

Hab. Campbellpur, Karáchi, Ceylon. Exp. 18 millim.

- 4609. Bostra balux, Swinh P Z S. 1884, p 519, pl 47, fig. 14, C & S no 1899
- d. Head, thorax, and abdomen fuscous brown. Fore wing dull pinkish brown, with some dark specks on costa; traces of a cell-speck, and pale nearly straight ante- and postmedial lines. Hind wing fuscous.

Hab. Karáchi. Exp. 14 millim.

4610 Bostra arida, Butl P. Z S 1881, p. 621, C. & S. no. 4852

Pale rufous slightly suffused with fuscous Fore wing with indistinct fuscous specks on costa, traces of ante- and postmediai lines, the latter oblique and angled inwards on vein 2 Hind wing fuscous

Hab. Karáchi. Erp 14 millim.

b'. (Comaria). Frons smooth and rounded,

82. Antennæ of male normal.

4611. Bostra castanoptera, Moore, Lep Ceyl III, p 260, pl 178, fig 7, C & S no. 4505.

Bright ferruginous slightly irrorated with fuscous. Fore wing with a white oblique medial line from cell to inner margin, with fuscous on its inner edge, an indistinct sinuous postmedial line excurved between veins 6 and 2. Hind wing fuscous, with traces of curved postmedial line.

Hab. Ceylon Exp. 20 millim.

4612. Bostra subviridescens, Warr A. M N. H (6) xvi, p. 466

2. Ochreous suffused with pale clive-green, abdomen with lateral black marks. Fore wing with pale specks on basal two-thirds of costa, indistinct diffused pale sinuous ante- and post-medial lines; a discocellular black speck; the medial area below and beyond the cell irrorated with a few black scales, a marginal series of black specks, two below apex and one near outer angle larger. Hind wing paler, an indistinct oblique dark antemedial line, a prominent postmedial line with pale outer edge, bent outwards at vein 5, the disk irrorated with black scales, a marginal series of black specks

Hab Khasis. Exp 20 millim.

b². Antennæ of male with the basal joint very long, the shaft with long cilia contorted and with two teeth at middle

4613 Bostra fascialis, Warr A. M N. H (6) xv1, p 465

Olive-green Fore wing with the costa narrowly black, with white specks on the medial portion; sinuous pale-edged black ante- and postmedial lines; a black discocellular spot, a marginal series of black specks. Hind wing with medial black band, edged by darker lines, the outer sinuous; a marginal series of black specks

Hab Sikhim; Khásis Exp 24 millim.

b (Megalomia) Patagia of male extending far beyond metathorax, with large tufts of hair below them

a' Mid tibiæ and 1st joint of tarsi smooth.

4614. Bostra carnealis, n sp.

3. Pale ochreous brown tinged with pink. Fore wing with traces of dark discocellular speck, an indistinct pink postmedial line curved from below costs to vein 2. Hind wing uniform. Underside with the outer area tinged with fuscous, the markings of fore wing dark

Hab. E. Pegu (Doherty). Exp 36 millim Type in coll.

Elwes

- b'. Mid tibiæ and 1st joint of tarsi in male fringed on inner side with long hair.
- 4615. Bostra angulifascia, Moore, Lep Atk. p 206, C & S no 4440.
- J. Dull ochreous; abdomen suffused with fuscous towards extremity. Fore wing with the base black-brown, bounded by a whitish antemedial line angled at middle, the medial area dull ochreous, with black discocellular spot and black and white specks on costa; the outer area black-brown, banded inwardly by the pale postmedial line, which is sinuous and bent inwards at vein 3 to below end of cell Hind wing with the basal half dull ochreous, the outer half pale fuscous Underside with indistinct curved postmedial line.

Hab. Sikhim. Exp. 22 millim.

Genus DILOXIA, nov.

Type, D fimbriata, Hmpsn.

Range S India

Palpi rostriform, downcurved at extremity and reaching well beyond the frons, which is rounded, maxillary palpi minute; antennæ of male with very long bristles and cilia, build slight; legs long and slender, the tibiæ smooth, the spurs long. Fore

wing broad; vein 3 from before angle of cell, 4, 5 from angle. Hind wing with vein 3 from before angle of cell, 4, 5 from angle; 6, 7 from upper angle.

4616. Diloxia fimbriata, n. sp.

d. Grey with a rufous tinge; head, thorax, and abdomen suffused with fuscous, wings slightly irrorated with fuscous.

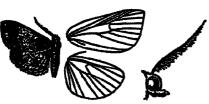


Fig 105.—Diloxia fimbriata, d. 1

Fore wing with the basal area fuscous, bounded by the pale curved antemedial line; the medial area paler, with a prominent black cell-spot and black specks on costa, bounded by the pale sinuous postmedial line, beyond which the area is more or

less suffused with fuscons. Hind wing with the basal area pale, bounded by a dark-edged curved pale medial line, with the area beyond it pinkish. Underside more suffused with pink.

2. More uniformly suffused with fuscous.

Hab. Nilgaris (Hampson). Exp. 24-30 millim. Type in B. M.

Genus PROPACHYS.

Propachys, Wik Cat xxvii, p. 6 (1868).

Type, P. nigrivena, Wlk.

Range. China; Sikhim; Khasis.

Palm rostriform and curving downwards at extremity, the end of the 2nd and 3rd joints tufted with long curved hair, forming a cavity in the male, in the female longer and slightly fringed with hair, maxillary palm minute and filiform, proboscis well developed, from rounded, antennæ minutely ciliated, male with a tuft of long hair from below the patagia, tabiæ and tarsi fringed with hair. Fore wing with the apex rounded; vein 3 from before angle of cell; 4, 5 from angle. Hind wing with vein 3 from near angle of cell, 4, 5 from angle; 6, 7 stalked.

4617. Propachys nigrivena, Wik Cat xxvn, p 17, C & S no. 4728.



Fig 106 - Propachys mgrivena, d

Bright crimson; palpi, legs, and abdomen black; head golden yellow. Fore wing with the veins beyond the cell, the median

nervure, the interno-median fold, and vein 1 streaked with black.

Hab. China, Sikhim, Khásis. Exp, & 38-44, 2 48 millim.

Genus ORYBINA.

Orybina, Snell Tijds. v Ent xxxviii, p 107 Oryba, Wlk. Cat xxvii, p 10 (1863), præocc.

Type, O flaviplaga, Wlk. Range Himalayas, Burma

Palpi of male rostriform, about twice the length of head, triangularly scaled, hollowed out inside, and with the apex very acute; in female more slender, and three to four times the length of head; maxillary palpi minute in male, filiform and upturned in female; frons smooth; antennæ of male minutely ciliated; tibiæ moderately hairy. Fore wing with the costa arched near base and apex, and slightly excised at middle, the apex produced, the outer margin excised below apex, then excurved, and oblique towards outer angle, vein 3 from close to angle of cell, 4, 5 from angle, the discocellulars arising from the subcostal nervure at origin of vein 11, so that veins 6, 7, 8, 9, 10 are stalked. Hind wing with vein 3 from near angle of cell; 4, 5 from angle; 6, 7 shortly stalked, the costa excised at middle in male.

4618 Orybina flaviplaga, Wik. Cat xxvi, p 11, C & S no 4729

J. Flesh-pink. Fore wing slightly suffused with fuscous, and the inner area with orange-red; a large golden-yellow patch slightly outlined with crimson from the discocellulars halfway to outer margin, bounded by veins 5 and 11, and with a diffused fuscous patch beyond it; an obliquely curved antemedial dark

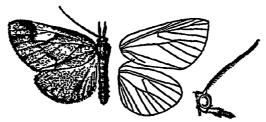


Fig 107 — Orybina flamplaga, 🗜 🚦

line; an inwardly-oblique crenulate fuscous line from the fuscous patch to middle of inner margin. Hind wing pale; the area from lower angle of cell to outer margin at apex and vein 2 orange-red, with the dark postmedial line on it. Underside with the apical area of fore wing grey.

Q. Flesh-pink, without the orange-red suffusion; fore wing with the antemedial line more oblique and produced as a dark streak along vein 1 to outer margin; hardly a trace of the dark

patch beyond the yellow patch.

Hab. Simla, Sikhim; Moment, Burma Etp., & 38, 248. millim.

- 4619. Orybina plangonalis, Wik Cat xviii, p 790, C & S no 4157. Oryba conspicualis, Snell. Trans Ent Soc 1890, p 562, pl 20,-fig 8
- Q. Purple-grey; palpi bright pink. Fore wing with almost the whole inner area suffused with flery red; an obliquely curved antemedial dark line; a red-edged yellow lumile beyond the discocillulars, and a red-edged hyaline spot at origin of veins 3, 4, 5, with an oblique dark line from it to inner margin, where it sometimes meets the antemedial line, some flery red on medial part of outer area; the veins dark, with some red scales on them. Hind wing pale, with a flery red patch from lower angle of cell to outer margin below apex and vein 2, and crossed by the curved dark postmedial line; the apex and calla from apex to vein 2 purplish grey.

Hab. Sikhim. Exp. 34 millim.

Genus PROTEINIA, nov.

Type, P. pallifrons, Snell. Range. Sikhim.

Q. Palpi porrect, slender, projecting about two and a half times length of head, the 3rd joint about half the length of 2nd, maxillary palpi minute, from rounded; antennæ nearly simple; tabæ smooth. Fore wing with the outer margin slightly angled at veins 6 and 4, then excised to outer angle; veins 3, 4, 5 from angle of cell, 6 from upper angle, 9 given off from 8 before 7; 10 free. Hind wing with the outer margin slightly angled at vein 4, veins 3, 4, 5 from angle of cell; 6, 7 from upper angle.

4620. Proteinia pallifrons, Snell Trans Ent. Soc 1890, p 560

2. Head, thorax, and abdomen reddish brown. Fore wing



Fig 108 -- Proteinia pallifrons, 9

deep coppery red; the costal area pale greybrown, with some white specks on costa; an illdefined oblique pale line from median nervure to near base of inner margin; a pale line from costa just before apex, curving out-

ards to the margin, then inwards to vein 2, where it is slightly angled; the cilia dark fuscous. Hind wing deep red, the basal half suffused with fuscous, pale curved sinuous ante- and postmedial lines, with a hyaline conical patch between them below lower angle of cell. Underside with double line from outer margin of fore wing at you 5 to anal angle of hind wing.

Hab. Sikhim. Exp. 34 millim.

Genus LORYMA.

Loryma, Wik Cat xix, p. 890 (1859). Tauba, Wik Cat xxxv, p 1766 (1866). Ulotrichodes, Rag Ann. Soc Ent Fr. 1891, p 58.

Type, L. sentiusalis, Wlk., from W. Africa Range. W and S Africa; China; Bhután; Bombay; Ceylon; Borneo.

Palpi porrect and straight, the 2nd joint thickly scaled and with a long sharp tuft of hair from extremity below extending as far as the 3rd joint; maxillary palpi filiform; antennæ of male fasciculate, with a sharp tuft of hair curved forward from basal joint, the shaft set on at an angle, tibiæ fringed with hair, the spurs long. Fore wing long and narrow, with the costa nearly straight; the outer margin very obliquely curved, vein 3 from near angle of cell; 4, 5 approximated for one-third length, 6 from upper angle; 7 given off from 8 before 9. Hind wing with vein 3 from angle of cell, 4, 5 approximated for nearly half their length; the discocellulars highly angled, veins 6, 7 from upper angle of cell.

4621. Loryma recusata, Wik. Journ Linn Soc vii, p 62 Loryma venosella, Wik Cat xxxv, p. 1767, C. & S no. 4704.

Grey and brown; abdomen brown, with whitish segmental



Fig 109 —Loryma recusata, 3

rings. Fore wing irrorated with black; the veins pale; a medial whitish line running out to an angle at origin of vein 2, then oblique to inner margin before middle; a curved submarginal white line with the area beyond it not irrorated

with black; a white line followed by a fine black line on the margin. Hind wing whitish, with traces of an oblique fuscous postmedial line with diffused fuscous inside it near costa; a marginal black line.

Hab. Bhután, Bombay; Ceylon, Borneo. Exp. 26 millim.

Genus CONSTANTIA.

Constantia, Rag. Bull Soc Ent Fr. 1887, p cxxxvii. Dattinia, Rag Bull Soc Ent. Fr 1887, p cxxxvii. Zonora, Swinh P Z S 1889, p 419
Mnesixena, Meyr Trans Ent Soc 1890, p. 472.
Palura, Rag Ann. Soc Ent Fr 1891, p 61

Type, C. colchicalis, H.-S., from E. Europe and Syria.

Range. S. and E. Europe, S. Africa; Armenia, Arabia; Persia;
Sind.

Proboscis absent; palpi porrect, downcurved, about the length of head, and thickly scaled, the third joint minute; maxillary palpi thickly scaled, antennæ with the basal joint thickly tufted

with scales in front; mid and hind tibise of male with the outer spurs short. Fore wing with the costa nearly straight; the inner and outer margins forming a nearly even curve, vein 3 from before angle of cell, 5 from above angle, 6 from upper angle; 7, 8, 9 stalked; 10, 11 free. Hind wing with the discocellulars highly angled, vein 8 from before angle of cell; 5 from slightly above angle, 6, 7 from upper angle.

SECT. I. Antennæ of male bipectinated for two-thirds length.

A (Palura). Fore wing with vein 9 given off from 8 beyond 7.

a. Fore wing with vein 5 widely separate from 4 at base.

4622. Constantia vulgaris, Butl P. Z S. 1881, p. 621; C. & S. no 4522

Pale brown irrorated with black. Fore wing with whitish antemedial band with black inner edge from the cell to mner margin and with two curves in it, two blackish marks in end of cell, the postmedial band arising from a whitish spot on costa near apex, then fuscous and curved inwards to lower angle of cell and terminating in a whitish dentate mark above inner margin; the margin and cilia with a moniliform white and brown band. Hind wing fuscous brown, the cilia white at tips Underside greyer, hind wing with traces of curved postmedial band.

Hab. Aden; Persia, Sind. Exp., of 22, 2 24 millim.

b. Fore wing with vein 4 stalked with 5 in male, approximated to it in female.

4623. Constantia eremialis, Swinh P. Z & 1889, p. 422.

Brownish grey suffused with fuscous Fore wing with traces of dentate antemedial pale line and of fuscous dentate postmedial line incurved from costs to lower angle of cell, then erect. Underside whitish, with dark spot on costa of fore wing before apex and large brown subapical patch to each wing

Hab. Aden; Sind. Exp., of 24, 234 millim.

B. (Constantia). Fore wing with vein 9 given off from 8 before 7 or from the same point as it.

4624. Constantia opiparalis, Swinh P Z. S. 1889, p 419, pl. 44, fig. 11.

fuscous; abdomen whitish. Fore wing with oblique silvery-white subbasal mark from below costs narrowing to middle of mner margin; a diamond-shaped mark in



and below end of cell; an oval spot in upper angle; Fig 110 - Constantia opeparales, 5 } an oblique streak from costa near apex; a dentate submarginal

band sending a streak inwards along vein 2, a curved mark above inner margin. Hind wing whitish, with dentate submarginal line from costa to vein 2, the margin brown.

2. More ochreous brown.

Hab. Sind. Exp., of 26, 2 30 millim

SECT. II (Dattima). Male with the antennæ ciliated, fore wing with vein 9 from 8 before 7.

4625. Constantia proximalis, Christ. Hor Soc Ent Ross xvii, p 116; id Rom Mém. iii, p 16, pl 1, fig 7

Hypotia ingrata, Butl P Z S 1881, p 621, C & S no. 4506.

Hypotia rubella, Swinh P Z S 1884, p 523, pl 48, fig 9, C & S. no. 4520

Pale ochreous brown Fore wing with the basal area darker and bounded by a black line with pale outer edge, slightly angled below cell, the medial area irrorated with fuscous, the postmedial black line with pale inner edge, arising from costa near apex, curved down to vein 2, then recurved to lower angle of cell and obliquely sinuous to inner margin. Hind wing ochreous with a slight fuscous tinge; traces of a pale submarginal line, the margin darker.

Hab. Armenia; Central Asia; Sind Exp 14-18 millim.

Genus TYNDIS.

Tyndis, Rag Ann Soc. Ent Fr 1891, p 83 Actenioides, Warr A M N. H (6) 1x, p 173 (1892)

Type, T. tanganialis, Rag, from E. Africa.

Range E Africa; India, Ceylon.

Palpi porrect, straight, and reaching well beyond the frons, the 2nd joint clothed with hair, the 3rd small, maxiliary palpi minute and filiform, antennæ of male with fascicles of cilia, the basal joint dilated, curved, and roughly scaled. Fore wing narrow, with the costa nearly straight, the outer margin oblique, vein 3 from angle of cell; 4, 5 approximated for one-third length, 6 from upper angle, 7, 8, 9 stalked, 10, 11 free. Hind wing with vein 3 from angle of cell; 4, 5 approximated for one-third length, 6, 7 from upper angle.

4626. Tyndis hypotialis, Swinh P. Z S 1885, p 866, C & S no 4529

Nephopteryx creperalis, Swinh. P Z. S 1885, p 877, pl. 57, fig 20, C & S no 4575

Stemmatophora mucidalis, Hmpsn Ill Het viu, p 34 (nec Guen).

Pale rufous irrorated with fuscous. Fore wing with diffused, almost erect antemedial dark line, a speck at end of cell; a postmedial diffused line slightly incurved below vein 5. Hind wing paler, with indistinct minutely dentate diffused postmedial

line not reaching costs or inner margin; both wings with a dark line through the cilis.



Fig 111—Tyndis hypotialis, of

The Travancore and Ceylon specimens have the antemedial line of fore wing absent, the latter has the base of costa fuscous; the postmedial line of hind wing absent; the underside suffused with fuscous and the postmedial line hardly trace-

able on either wing: creperalis is a fuscous-suffused female.

Hab. Khásis; Campbellpur, Karáchi, Mhow; Poons; Travancore; Ceylon Exp, of 20-24, 2 26 millim

4627. Tyndis plana, Will Trans Ent Soc. (3) 1, p. 92, C & S. no 1888
Anthophila zamia, Swinh P. Z. S 1884, p 518, pl. 47, fig 12, C & S no 1889
Hypota allalis, Swinh P Z S. 1886, p 462, pl 41, fig 2, C & S. no 4519

Ochreous white Fore wing with oblique medial dark line from cell to inner margin, with white inner edge, an obliquely sinuous postmedial line with white outer edge, and the dark part diffused inwards. Hind wing whiter, with curved fuscous postmedial line, hardly traceable in male, both wings with marginal dark maculate line and a dark line through the cilia.

Hab. Karáchi, Mhow Ewp, & 18, 2 22 millim

Genus DISCORDIA.

Discordia, Swinh P Z S 1885, p 448.

Type, D evulsa, Swinh Range Ceylon, Poona

Palpi porrect, projecting about the length of head and fringed with hair below at extremity Maxillary palpi nearly filiform; antenne of male nearly simple, mid and hind tibes with the outer terminal spurs short. Fore wing narrow, with the costa straight, the inner and outer margins almost evenly curved, vein 3 from before angle of cell, 4, 5 from angle, 6 from upper angle, 7 given off from 8 before 9, 10 and 11 free. Hind wing with vein 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle.

- 4628. Discordia evulsa, Swinh P Z. 8 1885, p. 448, pl 27, fig 2, C & S no 1719
- d. Ochreous slightly irrorated with fuscous Fore wing with oblique diffused fuscous line from lower angle of cell to inner margin near base, with a similar lumilate line from apex beyond

it; a marginal dark line Hind wing yellower. Underside with the costal area of each wing reddish.

Hab. Poons. Exp. 20 millim.

4629 Discordia basalıs, n sp.

Head, thorax, and abdomen grey suffused with fuscous. Fore



Fig. 112 -Discordia basalis, J. 1

wing grey irrorated with black, the basal area black-brown, bounded by a curved white line; a whitish submarginal line excurved between veins 6 and 2, a blackish apical patch continued as a very indistinct oblique band across the submarginal line to middle of inner margin; a marginal series of dark specks.

Hind wing paler, with indistinct pale curved submarginal line, the area beyond it suffused with fuscous; a marginal dark line.

Hab. Ceylon (Pole). Exp. 16 millim. Type in B. M.

4630. Discordia siniferalis, n. sp

White, marked with olive-brown and fuscous. Fore wing with an olive-brown patch on basal inner area and black marks on costa and inner margin; two indistinct fuscous medial lines arising from a mark on costa; a postmedial oblique line forming a deep and very prominent sinus to near outer margin between veins 6 and 4 filled in with fuscous, and with a black mark beyond it near apex and another near inner margin; a marginal series of black specks. Hind wing fuscous, with some black marginal specks.

Hab Ceylon (Pole). Exp, of 14, ♀ 16 millim.

Subfamily HYDROCAMPINÆ.

Moths of usually very slender build with the legs very long. Proboscis present. Fore wing with vein 7 from the cell; 10 stalked with 8, 9, except in a small percentage of specimens of some species of Nymphula and Oligostigma amongst Indian forms, and in a few species which occur in other faunas—this character, though highly characteristic of the subfamily, not having become very stable; these exceptions may be discriminated from the Pyraustina by their long maxillary palpi dilated at the extremity. Hind wing with the median nervure non-pectinate.

The larvæ of some species of Nymphula feed on water-plants

and are fitted for a life below the surface of the water.

Key to the Genera.

A. Palpi upturned.		
a Palpi with the 3rd joint long and acuminate.		
a' Frons rounded and not prominent.		
a Maxillary palpi filiform and of		
moderate length		
a ³ . Hind wing with the outer margin		
evenly rounded		
a4 Antennæ with the shaft smooth		
a ⁵ Palp with the 2nd joint short		
and broadly rounded with		[p. 230.
scales	23	ORPHNOPHANES,
b' Palpi with the 2nd joint long		•
and slender .	22	Luma, p 229.
b4 Antennæ with the shaft annulate	4,	CATACLYSTA,
b ³ Hind wing with the outer margin		[p. 196.
excised towards anal angle		
a Palpi with no sharp tuft at end of	_	
2nd joint in front	9	Амил, р 202
b. Palpi with a sharp tuft at end of	_	[p. 202.
2nd joint in front	8	Thybanoidma,
b ² Maxillary palpi filiform and very long,		
palpi with the 2nd joint smoothly	_	[p 190
scaled	1	MIXOPHILA,
c ² . Maxillary palpi long and dilated with		
scales at extremity	_	77
as Hind wing with veins 4,5 stalked	2	Eristena, p 190.
b3 Hind wing with yours 4, 5 from cell		
a4 Hind wing with the outer margin		37
evenly rounded	3	NYMPHULA, p 191.
b' Hind wing with the outer margin		r nort
excised below apex and lobed at	10	[p 207.
	ΤΩ	Oligosticma,
b'. From produced to a rounded prominence,		
maxillary palpi minute, hind wing with your 7 given off before end of cell	7	Clearconver a 900
A Poly with the 2rd sourt long and enstulate	"	Cymoriza, p. 200
3 Palpi with the 3rd joint long and spatulate		
at extremity, hind wing with vein 7 given off before end of cell	R	Мивотіма, р. 199.
c. Palp with the 3rd joint short and blunt	U	mosorima, p. 100.
a'. Palpi with a small triangular tuft in		
front of 8rd joint		
a. Fore wing with the cell more than		
half the length of wing		
a Fore wing with year 7 straight, hind		
wing with the cell more than half		
length of wing		
a Hind wing with the outer margin		[p 198.
slightly angled at middle .	5.	Symphonia,
b4 Hund wing with the outer margin		
excised below apex and lobed at		[p. 212.
rem 5	11	AULACODES
b. Fore wing with vein 7 curved, hind		F., 680
wing with the cell about a third		[p. 282.
	4	COPTOBASIS,
5º Fore wing with the cell less than half	٠ د	[p. 228.
the length of wing 1	.0	Hymenoptychis,

b'. Palpi with the 2nd and 3rd joints [p 232 conically scaled 25 Collorhyncidia, c'. Palpi with the 3rd joint naked.
a ² . Hind wing with the outer margin rounded [p 222] a ³ Fore wing with veins 4,5 stalked. 16 Perisyntrocha, b ³ . Fore wing with veins 3, 4 stalked 17 Stegothyris,
cal Fore wing with veins 3, 4, 5 from [p 223] cell a. Hind wing with veins 4, 5 from
cell as. Hind wing with vein 7 anastomosing with 8 almost to apex or coincident with [p 222.
it
annulate and not as long as fore wing . 21 Bradina, p. 226 b^5 . Antennæ with the shaft smooth and somewhat
longer than fore wing a ⁷ Abdomen of moderate [p. 286. length 30 PILETOGERA, b ⁷ Abdomen very long, espe-
cially in male . 19 TATOBOTYS, p. 224 b' Hind wing with veins 4, 5 stalked. 26. DIATHRAUSTODES, b'. Hind wing with the outer margin [p 233] truncate and excised towards anal
angle 20 Almonia, p. 225. B Palpi porrect a Palpi once to twice the length of head a'. Palpi triangularly scaled, the third joint
hidden by hair [p. 233. a ² Hind wing with vein 4 absent . 27. DIATHRAUSTA, b ² Hind wing with vein 4 present a ³ Hind wing with veins 4, 5 not
approximated towards origin 33 Mabra, p 240 b ³ Hind wing with veins 4, 5 closely approximated for a short distance
a ⁴ . Fore wing long and narrow, vein 3 from before angle of cell 28 STENIA, p 234 b ⁴ Fore wing subtriangular, vein 3 from angle of cell
a ⁵ Palpi projecting about the length of head, antennæ with the shaft smooth 29 HYALOPLAGA, b ⁵ Palpi projecting about twice the length of head contemporate
length of head, antennæ with the shaft annulate . 13 DAULIA, p. 220 b'. Palpi straight and fringed with long hair below, the 3rd joint prominent
a ² . Maxillary palpi filiform 14 Talanga, p 221. b ² . Maxillary palpi triangularly scaled 12 Parthenodes, [p 216.

5 Palpi projecting three times the length of p. 288. head and straight 31 CAMPTOMASTYX c Palpi projecting three times the length of p 239.

32 HYDRORYBINA, head and downcurved at extremity

Genus MIXOPHILA.

Mixophila, Meyr Trans Ent. Soc 1887, p 269 Angonia, Snell Tijd v Ent. xxxvi, p. 54, 1898

Type, M renatusalis, Wik.

Range Himalayas, Ceylon, Burma, Malayan subregion to Sambawa

Palpi upturned, the 2nd joint smoothly scaled and not reaching vertex of head, the 3rd well developed and acuminate, maxillary palpi long and filiform, from rounded, antennæ annulate; tibiæ with the spurs long and equal Fore wing with the apex rectangular, vem 3 from well before angle of cell; 4,5 well separated at origin; 7 straight and well separated from 8, 9, 10. Hind wing with yein 3 from before angle of cell, 4,5 well separated at origin; 6, 7 from upper angle.

4631. Mixophila renatusalis, Wik Cat xvii, p 484 Crambus ermineus, Moore, Lep Ceyl 111, p. 380, pl 184, fig 7, C. & S no 4438 A Angonia crambidalis, Snell Tijd v Ent xxxvi, p 56, pl 3, fig. 1.

Pure silvery white; abdomen tinged with fulvous at middle.



Fig 113. Mixophila renatusalis, 3

Fore wing with fuscous line just beyond middle, highly excurved beyond cell and expanding into a spot at inner margin, a sinuous submarginal line bent out to near the margin at vein 6, with golden-yellow streaks on the veins beyond it and a black spot between veins 3 and 4; a black marginal line at apex, cilia

fuscous at tips Hind wing with the apical area slightly tinged with fuscous

Hab. Bhutan, Dharmsala, Ceylon; Shan States, Borneo; Java, Sambawa, New Guinea. Exp. 14 millim.

Genus ERISTENA.

Eristens, Warr. A M N H (6) xvii, p 149 (1896).

Type, E murinalis, Warr. Range. Khasis; Ceylon

Differs from Nymphula in the antennæ being slightly annulated; the wings very long and narrow. Hind wing with veins 4, 5 on a long stalk; 7 anastomosing with 8 almost to apex.

4632 Eristena postalbalis, Hmpsn Ill Het. 1x, p 175, pl 174, fig 3.

Q. White, the palpi and a spot behind collar fuscous, abdomen with pale fuscous bands. Fore wing with the basal half of costa and patches of the inner area suffused with fuscous, a black speck on costa just beyond the middle, with a sinuous fuscous line



Fig 114.—Eristena postalbalis, ♀

arising just beyond it and met at inner margin by a sinuous postmedial line; a yellow patch beyond the cell between the two lines, a sinuous submarginal fuscous band with a yellow patch on it below costa, a yellow marginal band

tapering and becoming fuscous towards outer angle, a black line on its inner edge and some black marginal specks towards apex. Hind wing with traces of oblique fuscous antemedial line from cell to inner margin, a large black discocellular spot, an indistinct postmedial line curved from costa to lower angle of cell, then excurved again; an indistinct sinuous submarginal band, broad towards costa, a waved line near margin, with three marginal black specks beyond it and an indistinct marginal fuscous line.

.Hab. Ceylon Exp. 18 millim.

4633 Eristena murinalis, Warr A M N H. (6) xvii, p. 150

J. Silky grey-brown Hind wing with the basal two-thirds whitish; a discocellular speck and fine dark postmedial line; both wings with a dark line through the cilia.

Hab Khásis Exp 20 millim.

Genus NYMPHULA.

Nymphula, Schrank, Fauna Boica, 11, pt. 2, p. 162 (1802) Parapoynx, Hubn Verz p 362 (* 1818) Hydrocampa, Latr Fam. Nat p 478 (1825)

Type, N. nymphæata, Linn., from Europe.

Range Universally distributed.

Palpi upturned, the 2nd joint moderately fringed with hair in front and reaching vertex of head, the 3rd well developed and acuminate, maxillary palpi long and dilated with scales at extremity, frons rounded; antennæ annulated, legs long, the tibiæ smooth, with the spurs almost equal. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10*. Hind wing with the cell about half the length of wing; veins 3, 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8 very strongly

^{*} In some specimens of N. nymphæata, responsalis, and affinialis, vein 10 arises from the cell, though in the large majority of specimens stalked with 8, 9.

4634. Nymphula fædalis, Guen. Delt. & Pyr. p. 228, pl 4, fig 7; C & S no 4434

Isopteryx tenellalis, Guen Delt & Pyr p 228
Isopteryx leucothoalis, Wth. Cat xvii, p 400
Isopteryx spilomelalis, Wth. Cat xvii, p 403.
Hydrocampa scitalis, Led. Wien ent. Mon 1863, p. 451.
Physematia epispila, Meyr Trans. Ent. Soc. 1886, p 257.

Head fuscous and white; thorax white spotted with black; abdomen white banded with fuscous, and with paired black spots on basal segments. Fore wing white; four black spots near base; curved subbasal and sinuous antemedial lines, a black spot in cell and discoccilular band, fuscous suffusion in, below, and above end of cell on costa. Hind wing with discoccilular black spot; some fuscous suffusion below and beyond end of cell; both wings with the marginal area fuscous, with dentate white line enclosing a series of triangular black spots on the margin.

Hab Ethiopian, Oriental, and Australian regions. Exp. 16 millim.

4635. Nymphula responsalis, Wlk. Cat. xxxiv, p 1826
Nymphula turbata, Butl Trans Ent Soc 1881, p 586
Paroponyx marmorea, Meyr Trans Ent Soc. 1885, p 434
Isopteryx enixalis, Swinh P Z S 1885, p. 869, C & S no. 4488
Cymonza linealis, Moore, Lep Atk p. 210, C & S no 4392

Head and thorax white irrorated with brown and black; abdomen white, with broad brown and black bands. Fore wing blackish and fulvous, with indistinct subbasal and curved antemedial white bands; sinuous medial and postmedial white lines, the former angled outwards to lower angle of cell, the latter angled inwards below costa, bent out to vein 3, and retracted so as almost to meet the medial line at lower angle of cell, the area between them usually with more or less white both on its costal and inner portions, and with a very ill-defined fulvous lumile beyond the discocellulars; a very irregular submarginal white band, dentate below middle; a marginal lunulate black and fulvous band, dentate below vem 5. Hind wing with a dark spot near base of inner area, a diffused antemedial dark band from cell to nner margin, with a line beyond it; a dark-edged fulvous spot beyond cell; a postmedial sinuous line nearly meeting the medial line at inner margin, with a diffused fuscous and fulvous band beyond it; a marginal fulyous and black lunulate band.

The distribution of the black, fulyous, and white areas is

extremely variable

Hab Japan, throughout India, Ceylon, and Burma, Australia. Exp. 18-20 millim.

4636. Nymphula crisonalis, Wik. Cat xix, p 961, Hmpsn. Ill Het. ix, pl 174, fig 8; C. & S. no 4897
Parapoynx hebraicalis, Snell Tyd v Ent xxiii, p. 240, and xxvii, pl. 4, fig 11.

Parapoynx myma, Meyr. Trans Ent. Soc. 1885, p. 432

Differs from affinialis in being fuscous brown; wings with the

markings obscured, fore wing with the fulvous yellow postmedial band interrupted, bent inwards to costa round the discocellular mark which is lumulate, traces of a curved submarginal line sometimes developed into a black-edged fulvous band. Hind wing with two obscure oblique waved postmedial fuscous lines, which may be developed into black-edged fulvous bands, both wings with hardly a trace of the marginal fulvous band, and with a series of black specks at base of cilia

Hab Chekiang, China, Ceylon, Java, Celebes, Australia.

Exp. 22 millim.

4637 Nymphula affinialis, Guen Delt. & Pyr. p 270, C & S. no 4396
Potys ardealis, Feld Reis Nov pl 134, fig 31, C & S no 4045
Oligostigma incommoda, Butl P Z S 1881, p 180, C. & S. no 4411

White, more or less suffused with yellowish brown and irrorated with black, abdomen with fuscous band. Fore wing with very ill-defined oblique yellow antemedial and medial bands; an incomplete black discocellular annulus, a better defined yellow postmedial band excurved from costa to vein 3, then retracted to origin of vein 2, a diffused fuscous band on outer area, a black submarginal line and yellow marginal band. Hind wing white with black discocellular speck, a diffused fuscous postmedial band traversed by an indistinct white line, a black submarginal line and yellow marginal band.

Hab Socotra, Simla, Sikhim; Karáchi; Mhow, Poona,

Bombay; Nicobars Exp. 20 millim.

4638 Nymphula diminutalis. Snell Tyd v. Ent xxiii, p 242, & xxvii, p. 48, pl 5, fig 1.

Differs from affinialis in the postmedial yellow band of fore wing being incurved to costa nearer the black annulus, a sinuous submarginal yellow band, its outer edge indented above middle, its inner edge dentate on vein 2. Hind wing with antemedial line from cell to inner margin, a postmedial line curved from costa to lower angle of cell, then oblique; a sinuous yellow submarginal band, its outer edge indented below costa.

Hab China; Punjab; Bombay; Ceylon; Java; Celebes.

Exp. 12-16 millim.

4639. Nymphula fluctuosalis, Zell. K Vet-Ak Handl. 1852, p. 27.
Paraponyx linealis, Guen Delt & Pyr. p 271, C & S. no. 4399.
Oligostigma chrysippusalis, Wlk Cat xvii, p 432.
Oligostigma obitalis, Wlk Cat xvii, p. 432
Parapoynx apitalis, Led Wein ent Mon. 1863, pp 452, 485.
Oligostigma curta, Butl Ent Mo. Mag xv p 270.
Paraponyx oryzalis, Wood-Mason, Rice Pest of Burma, Calcutta, 1885, C & S no 4400

Head and thorax white, irrorated with black; abdomen white vol. IV.

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with broad black-edged fulvous bands. Fore wing white; the costal area tinged with fulvous and irrorated with black, oblique subbasal and antemedial black bands, tinged with fulyous from cell to muer margin, an indistinct fulvous spot in cell, and black



Fig 115 - Nymphula fluctuosalis, J. &

spot at upper angle, a very oblique fulvous-tinged black band, curved from the costs near apex to lower angle of cell, then straight Hind wing with oblique subbasal line from cell to inner margin, where it is nearly joined by a very oblique line

from costa beyond middle; both wings with a slightly curved oblique black-edged fulvous postmedial band, a black line near the margin, a fulvous marginal band and black line at base of cilia

Prof Wood-Mason described and figured as orgalis the larva and pupa of an aquatic species which is probably fluctuosalis. Larva whitish, the head with a few long hairs and five ocelli on each side in a crescentic form, the somites with a few stiff setse and with four longitudinal series of delicate white filaments acting as tracheal gill-tufts, arranged in groups of two to four filaments, two of the series being above the spiracles and two below. It is very destructive to rice-crops in Burma

Pupa fusiform and pale brown, with the stigmata of the three first abdominal somites large and nipple-like and open to the air-

chamber of the cocoon

Hab Throughout the tropical and subtropical zones, on the north to Formosa and the Sandwich Islands, on the south to Australia. Eap 16-20 millim.

4640. Nymphula votalis, Wik. Cat xvii, p 488, Hmpen Ill Het. 1x, pl 174, fig 4, C & S. no. 4402

Differs from fluctuosalis in the ground-colour being brown; abdomen ringed with black, but without fulyous bands, wings without any of the full ous markings, which are replaced by black. Fore wing with the line from costa beyond middle not so much bent inwards to angle of cell, finer towards inner margin, and on hind wing further from the antemedial line; both wings with the postmedial band diffused and fuscous, the culta fuscous.

Hab. Calcutta; Nilgiris; Ceylon, Rangoon. Exp. 16 millim.

4641. Nymphula leucostola, n. sp

d. Differs from votalis in the ground-colour being pure white, the head brown, abdomen ringed with brown and with brown bands on the subbasal and subterminal segments Fore wing with the costal area suffused with brown, the subbasal and antemedial lines obsolescent, the line beyond faiddle fine and evenly curved; both wings with the diffused postmedial band brown and prominent; a marginal series of specks with a line inside it replacing the marginal band.

Hab Rangoon. Exp 14 millim. Type in B M.

4642. Nymphula fusalis, n. sp

Whitish thickly irrorated with dark grey; head and abdomen suffused with fuscous. Fore wing with the costal area suffused with fuscous, dark spots below middle of cell and in cell, both wings with black discocellular spot, the postmedial line highly excurved between veins 6 and 4, then retracted to origin of vein 2; the outer area suffused with dark grey and with traces of slightly sinuous fulvous line on its inner edge; a minutely waved black line just inside the margin, a black line through the cilia

Hab Nágas (Doherty). Evp., & 16, 2 26 millim. Type in

coll. Elwes.

4643 Nymphula fuscicostalis, n sp

Q. White; head and collar tinged with fuscous brown. Fore wing with the costa tinged with fuscous to beyond middle, a dark antemedial spot below cell and others at middle of cell and on discocellulars, a series of dark specks just inside the margin. Hind wing with antemedial series of dark specks; traces of postmedial and submarginal lines, and of a series of specks just inside margin.

Hab Calcutta. Evp. 28 millim. Type in B. M.

4644. Nymphula depunctalis, Guen Delt & Pyr p 274; C & S no 4174

Nymphula stagnalis, Zell K Vet-Ak Handl 1852, p. 26 (præocc) Zebronia decussalis, Wlk Cat xvn, p 481.

Pure white Fore wing with the costa dark, a dark speck on a fulvous spot below middle of cell; a fulvous spot below origin of vein 2; two black discocellular specks, an oblique fulvous band beyond the cell from costa to vein 5; a submarginal fulvous band, narrowing below vein 5, or often reduced to specks and obsolescent. Hind wing with dark discocellular speck, sinuous medial and postmedial fulvous bands usually broken up into spots, both wings with a fine crenulate fulvous or dark brown line just inside the margin and a more or less developed marginal series of specks.

Hab. S Africa, throughout India, Ceylon, and Burma; Java;

Australia. Exp. 16 millim.

4645. Nymphula simplalis, Snell Trans Ent. Soc 1890, p. 638.

c. Whitish very slightly suffused with rufous Fore wing with traces of obliquely curved antemedial line and of a white dark-edged discocellular spot; slight rufous suffusion along median nervure and beyond lower angle of cell; a postmedial black line, prominent. sinuous, and outwardly oblique from costa to vein 3,

then almost obsolete and retracted along vein 2 to below angle of cell, the area beyond it suffused with rufous, leaving a white patch at apex and white specks on the inner side of the pale yellow marginal band, which has a minutely waved black line on its inner side. Hind wing with nearly straight antenedial black line, a discocellular spot, a postmedial line excurved beyond cell, the outer area suffused with rufous; a marginal yellow band with fine black line on its inner edge

Hab. Sikhim Exp. 20 millim

Genus CATACLYSTA.

Cataclysta, Hubn Verz p 363 (? 1818)

Type, C. lemnata, Schiff, from Europe.

Range Universally distributed

Palpi upturned, the 2nd joint reaching vertex of head and slightly fringed with hair in front, the 3rd well developed and acuminate, maxillary palpi small and filiform; frons rounded, antennæ annulated with rings at the joints, legs long, slender, the spurs long and nearly equal. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle, or stalked.

- SECT I. Fore tars: of male naked, hind wing with vein 7 anastomosing with 8.
- 4646 Cataclysta angulata, Moore, Lep. Ceyl. 111, p 300, pl 181, fig. 12; C & S no 4415.
- 6. Fulvous yellow, some white on vertex of head and thorax. Fore wing with black subbasal and antemedial spots on costa with obscure lines arising from them, a postmedial white band curved and running as a fascia along median nervure to base, joined by two white fasciae from upper angle of cell, and with its inner edge defined by fuscous suffusion and a black speck on costa, a submarginal curved white band with black line on its outer edge; a black marginal line. Hind wing with traces of a diffused fuscous antemedial band; a series of six small black spots close to the margin, inwardly defined by white.

Hab. Ceylon. Exp. 14 millim.

- 4647. Cataclysta cræsusalis, Wil. xvii, p. 449
 Cataclysta trigonalis, Swinh A M N H (6) xvi, p 304
- 6. Dusky fulvous. Fore wing with large white triangular postmedial mark on costs, with its apex on vein 2; a white band inside the dark-edged orange marginal band; a marginal series of dark specks. Hind wing with the basal third pale fulvous; the outer two-thirds orange with a black line on its miner edge; a submarginal minutely waved dark line with pale marks on its

inner edge at costa and towards inner margin; some dark marginal marks and four small black spots on medial part of margin.

Hab Khásis, Borneo Exp 16 millim

- 4648 Cataclysta trimacula, Hmpsn. Ill. Het viii, p 139, pl 155, fig 14
- Q. Orange-yellow. Fore wing with the base whitish, suffused with fusious below costa; a medial conical pale fusious-irrorated patch with its apex below the costa; an oblique postmedial white band from costa to vein 5; a similar submarginal band tinged with fusious at apex; a silvery fusious spot near outer angle Hind wing with the base whitish, followed by a broad yellow band; the postmedial area white, irrorated with brown scales on its inner side and on costal area; a marginal yellow band with three very large black spots on it centred with metallic blue.

Hab. Nilgiris. Evp. 18 millim

- *4649. Cataclysta mesorphna, Meyr Trans Ent Soc 1894, p 10.
- 3. Dark fuscous Fore wing with orange antemedial band not reaching the costa and preceded by pale leaden lines; the apical area orange, with a long wedge-shaped postmedial leaden mark from costa, a silvery-white wedge-shaped dark-edged band from costa before apex to inner margin beyond middle, a leaden-coloured spot at anal angle Hind wing with the disk irrorated with white; an orange fascia on inner area; a curved postmedial white line, four large black spots on outer margin separated by orange dots with golden scales above them, the 1st and 4th spots centred with gold; vein 7 anastomosing with 8 to apex, both wings with the cilia fuscous

Hab. Shán States. Exp. 12 millim.

- SECT. II. Fore tars in male with the proximal segments fringed with hair on both sides, hind wing with vein 7 coincident with 8.
- 4650 Cataclysta fuscalis, Hmpsn Ill Het ix, p 178, pl 174, fig 13.
- Q. Grey thickly irrorated and suffused with fuscous black-brown. Fore wing with obscure fulvous oblique fascia from lower angle of cell to outer margin above outer angle, obscure dark-edged fulvous submarginal and marginal bands from costa to vein 3. Hind wing with double sinuous postmedial dark line well separated from the marginal yellow band, on which are five conjoined black spots centred with metallic blue, the spot nearest anal angle double.

Hab Bhután, Ceylon Exp 14 millim.

4651. Cataclysta blandialis, Wik Cat xvii, p 448, Moore, Lep. Ceyl. in, pl 179, fig 15, C & S no 4416 Cataclysta patnalis, Feld. Reis Nov pl. 136, fig 7; C. & S. no 4425 Cataclysta bombayensis, C & S no 4417 Cataclysta cunesfera, Moore, Lep Ceyl ni, p. 300, pl 179, fig 14; C & S no 4418

Cataclysta junctalis, Hmpsn. Ill Het. viii, p 140, pl. 155, fig 24 Cataclysta nigritalis, Hmpsn Ill Het. ix, p 178, pl 174, fig 5

Fulvous yellow, thorax suffused with fuscous Fore wing fulvous yellow with the base fuscous and silvery, its outer edge oblique, a large conical medial patch with its apex on costa, whitish, thickly irrorated with brown and edged by silvery white lines. an oblique triangular silvery postmedial mark from costa to



Fig 116 -- Cstaclysta blandiales, of

vein 5, sometimes white. sımılar submargınal band from costa to vein 2, and an oblique silvery streak above outer angle. Hind wing with base fuscous and silvery. followed by a fulvous yellow band ending at

anal angle; the rest of the wing white, thickly irrorated with brown scales, a more or less prominent black-edged yellow discocellular spot, a yellow and orange marginal band inwardly edged by a sinuous brown line and with four large black spots on it centred with metallic blue.

The form painalis is small; the head, thorax, and abdomen grey or suffused with grey, wings paler, the whitish areas less suffused with brown, fore wing with the basal grey and silvery area conjoined along the costs to the medial patch, hind wing with the apical marginal spot formed of two conjoined spots with separate blue centres

Nigritalis has the head, thorax, abdomen, and grey areas of the wing suffused with smoky black

Hab. Dharmsála, Calcutta, Bombay, Nilgiris, Ceylon, Borneo, Amboma. Eap. (patnalis) 12-16, (blandialis) 16-20 millim.

Genus SYMPHONIA, nov.

Type, S. multipictalis, Hmpsn.

Range Cevlon.

Palpi upturned and hardly reaching vertex of head, the 2nd joint fringed with long hair in front, the 3rd with a small triangular tuft; maxillary palpi dilated with scales, from rounded, antennæ of male thickened and flattened, tibiæ with the outer spurs half the length of unner, male with the claspers elongate Fore wing with the outer margin slightly angled at middle, veins 3, 4, 5 from angle, 6 from below upper angle, 7 straight and well separated from 8, 9, 10; 11 free Hind wing with the outer margin slightly angled at middle, the cell more than half the length of wing; veins 3, 4, 5 from angle, 6, 7 from upper angle.

4652. Symphonia multipictalis, n. sp

o. White; head, thorax, and abdomen variegated with pale brown and black, wings variegated and striated with yellow-brown, sepia, and black. Fore wing with the more prominent markings consisting of an irregular dark medial band conjoined to some



Fig 117
Symphonia multipictalis, of }.

yellow-brown patches beyond it, and with black spots on it at end of cell and on vein 1; a submarginal series of spots most prominent from below costa to vein 4, followed by some brown marks inside the margin, and a series of black marginal spots from costa to the angle Hind

wing with the more prominent markings consisting of some black marks at and below end of cell, some black marks below apex, followed by a red-brown patch, a marginal series of black spots.

Hab Ceylon (Pole) Evp 18 millim. Type in B.M.

Genus MUSOTIMA.

Musotima, Meyr Trans Ent Soc 1884, p 288

Type, M aduncalis, Feld, from New Zealand.
Range S India, Ceylon, Australia, New Zealand.

Palpi upturned, the 2nd joint not reaching vertex of head, and thickly fringed with hair, the 3rd well developed and spatulate at extremity; maxillary palpi short and filiform, frons rounded; antennæ of male thickened and flattened, with appressed serrations; tibiæ with the spurs long and equal, male with a tuft of long bair springing from base of tore coxæ. Fore wing with the apex produced and acute, the outer margin excised below apex, vein 2 curved and arising near angle of cell, 3, 4 from angle, 5 from above angle, 7 straight and well separated from 8, 9, 10; male with a more or less prominent foveal depression in cell. Hind wing with the outer margin excised below apex and towards anal angle; veins 3, 4 from angle of cell, 5 from above angle, 7 from before upper angle.

- SECT. I Outer margin of fore and hind wings deeply excised below apex, three indentations towards anal angle of hind wing.
- 4653 Musotima suffusalis, Hmpsn Ill Het ix, p 178 pl 174, fig 20
- d. Head and thorax fuscous and white. Fore wing yellow; the base fuscous and white, a very obscure antemedial dark line with a whitish patch beyond it on costa, angled on median nervure, and with fuscous suffusion beyond it on inner area a postmedial white band from costa to vein 4, where it is bent inwards to a sharp point at lower angle of cell, its inner edge defined by a black spot on costa and line crossing the retracted portion, a sinuous

black-edged submarginal band arising from apex and recurved for a short distance above inner margin. Hind wing yellow suffused with black, except at base and on apical area, an antemedial white band expanding into a quadrate patch in end of cell, which has black spots at its two angles; a narrow crenulate postmedial black-edged band with a little white on it, and excurved beyond lower angle of cell, a sinuous white submarginal band with black outer edge, both wings with a marginal black line, the cilia fuscous and white

Hab Bangalore, Ceylon. Evp 14 millim

SECT. II Fore and hind wings with the outer margin slightly excised below apex, hind wing excised but not indented towards anal angle.

4654. Musotima acclaralis, Wik Cat xvii, p 403, Hmpsn. Ill Het. ix, pl. 174, fig 24, C & S no 4389

d. Fulvous yellow; head and thorax marked with white; abdomen ringed with white, and tinged with fulvous towards



Fig 118 —Musotima acolaralis, d

extremity. Fore wing with the base of costa black; two obscure waved white subbasal bands, the inner not reaching costa, a blackedged waved white antemedial band expanding into a spot below cell, a large black-edged white discocellular lunule with two

white spots on black suffusion between it and inner margin; a black-edged white postmedial band curved inwards and terminating at vein 3, a white spot inside it above vein 5, a sinuous black-edged white submarginal band becoming maculate towards inner margin, a black marginal line. Hind wing pale, with subbasal and antemedial lines, becoming black towards inner margin, a sinuous black-edged postmedial white band excurved beyond cell, and with black suffusion inside it towards inner margin, a black-edged fulvous marginal band with series of white specks inside it

Q. With the white spot inside the postmedial band of fore wing absent, the whole outer half of fore wing and the apical and anal areas of hind wing usually suffused with dark brown

Hab. Nilgiris, Ceylon Erp 18 millim

Genus CYMORIZA

Cymoriza, Guen Delt & Pyr p 271 (1854)

Type, C wrectalis, Guen
Range Himalayas, Assam Java
Palpi upturned, the 2nd joint reaching vertex of head and

thickly scaled, the 3rd well developed, acuminate, and conically scaled; maxillary palpi minute, from produced to a rounded prominence, antennæ of male thickened and flattened, this clothed with rough hair on outer side, the spurs long and equal. Fore wing with veins 3, 4, 5 from angle of cell, 6, 7 stalked in male, and well separated from 8, 9, 10; a glandular swelling on costa just beyond the middle Hind wing with the outer margin excised below apex, and twice towards anal angle; veins 3, 4, 5 from angle, 7 from before upper angle

4655 Cymoriza irrectalis, Guen Delt & Pyr p. 272 (part), C. & S. no 4391

Q. Fulvous, suffused with fuscous, frons white, thorax and base of abdomen marked with white. Fore wing with the base white, except costal area, an oblique subbasal white band from subcostal nervure to inner margin; a sinuous antemedial white band expanding in cell and on inner margin, a black-edged white discocellular spot; a postmedial white band broad from costa to vein 3 and sending a spur inwards above vein 5, then incurved and maculate. Hind wing with white basal patch, a sinuous white antemedial band expanding in end of cell, and with the black discocellular spot on its outer edge; the postmedial band broad from costa to vein 5 and dentate on its inner side, then incurved, sinuous, and maculate, both wings with a black-edged orange marginal band with a series of black specks on it, and with a maculate white band inside it expanding below costa and on inner margin of hind wing, a black line through the cilia

Hab. Sikhim, Bhután, Nágas. Exp. 24-30 millim.

4656 Cymoriza ustalis, Wik Cat xxxiv, p 1529.
Cymoriza irrectalis, Guen Delt & Pyr p 272 (part), pl 9, fig 4.
Cymoriza fascialis, Warr. A M N H (6) xviii, p 223

Differs from *irrectalis* in the fore wing having the basal patch and subbasal band obsolescent, the antemedial band narrow and more regular; two obliquely placed black-edged white discocellular



Fig 119 - Cymoriza ustalis, o

spots, the postmedial band maculate throughout, and not sending a spur inwards above vein 5, the white submarginal band expanding more below costa and at inner margin. Hind wing with the medial area wholly suffused with

fuscous black, the antemedial white band not expanding in cell, and indented by the discocellular black spot, the postmedial band not dentate on inner side below costa

Hab Dharmsála; Kulu; Sikhim, Java. Erp 36 millim.

Genus THYSANOIDMA.

Thysanoidma, Hmpsn Ill Het vin, p. 142 (1891).

Type, T octales, Hmpsn. Range Assam, Nilgiris

2. Palpi upturned, the 2nd joint not reaching vertex of head, and with a long pointed tuft of hair in front at extremity, the 3rd well developed and acuminate; maxillary palpi filiform, frons rounded, antenns of female minutely ciliated, legs long and slender, the spurs nearly equal. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight, and well separated from 8, 9, 10; 11 from angle of cell. Hind wing with the outer margin much excised below apex, and with three indentations towards anal angle, the inner and outer margins towards anal angle fringed with long spatulate cilia of varying lengths, veins 3, 4, 5 from angle of cell, 6, 7 from upper angle

4657. Thysanoidma octalis, Hmpen Ill Het vm, p. 142, pl 156, fig 19

2. Head and thorax black and grey; abdomen fulvous yellow. Fore wing smoky black, traces of an antemedial pale line, a pale sinuous medial line, with a yellow patch beyond it, from costa to



Fig 120 —Thysanoidma octalis, ♀. •

lower angle of cell, followed by a deeper black patch; the pale postmedial line nearly straight from costa to vein 2, then retracted to lower angle of cell, and excurved again, the apical area yellow, becoming white at apex, some dark

marginal specks and a white spot above outer angle Hind wing orange-yellow; the basal area smoky black, bounded by a pale sinuous antemedial line, a large black reniform discocellular spot, the postmedial pale line defined by black suffusion on inner side, curving round from costa to below lower angle of cell, then obsolete; some white spots on the margin.

Hab. Margharita, Assam, Nilgiris. Evp. 16 millim.

Genus AMBIA.

Ambia, Wlk. Cat xix, p. 957 (1859) Opisthedeicts, Warr A. M. N. H (6) vi, p 478 (1890).

Type, A ptolycusalis, Wlk., from Borneo.

Range Neotropical region; India, Ceylon; Burma; Malayan subregion.

Palpi upturned, the 2nd joint reaching vertex of head and nearly naked, the 3rd long and acuminate, maxiliary palpi filiform and of moderate length, irons rounded, legs of moderate length, the spurs long and equal. Fore wing with the apex slightly

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produced, the outer margin somewhat excised below apex; veins 3, 4, 5 usually from angle of cell, 7 straight and well separated from 8, 9, 10 Hind wing with the apex produced; the outer margin somewhat excised below apex, and with two excisions towards anal angle, the inner margin very short; veins 3, 4 from angle of cell, 5 usually from somewhat above angle, 6, 7 from upper angle.

SECT I. Fore wing with vein 11 absent, antennæ of male thickened and flattened.

A. Both wings with veins 4, 5 stalked

4658 Ambia tenebrosalis, n sp

d. Head and thorax fuscous irrorated with white; abdomen fuscous ringed with white, the anal tuft white, wings fuscous. Fore wing with indistinct dark subbasal line, with some white on its outer edge, two indistinct medial lines with a white patch on costa between them with a black speck on it, an oblique black-edged white band across apex, with a black costal speck on its inner edge; a black-edged fulvous marginal band. Hind wing with dark discocellular lunule and indistinct double sinuous post-medial line.

Hab Ceylon (Pole) Evp 12 millim. Type in B M.

B. Both wings with veins 4, 5 from cell.

4659. Ambia albipunctalis, Warr. A M N H (6) xvii, p 202.

Q. Fuscous brown, palpi below and legs pure white Fore wing with obscure subbasal, aute- and postmedial dark lines, the two former arising from white specks on the costa, a triangular white spot on middle of costa, with the white discocellular lunule below it, the costal part of postmedial line white, a submarginal series of dark specks, the apical spot more prominent, and with white lunule on its inner edge. Hind wing with dark sinuous ante-and postmedial lines and submarginal series of dark specks.

Hab Khásis, Ceylon. Exp. 10 millim.

4660. Ambia xantholeuca, n sp.

Q. White; head, thorax, and abdomen marked with orange. Fore wing with subbasal and antemedial orange bands; a discocellular orange patch, with an oblique line from it to costa and small triangular spot on costa, a short medial band from vein 2 to inner margin, some black irroration beyond the discocellular patch, a postmedial fuscous line with some orange on its outer edge, excurved from costa to vein 2, then retracted and double, an orange marginal band, ending above outer angle. Hind wing with subbasal orange band, a black-edged orange medial band, with some black at costa and inner area, between it and the highly

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sinuous black-edged white postmedial band, the area beyond which is orange, with a short black-edged white submarginal band between veins 3 and 1 b.

Hab Ceylon (Pole). Exp 14 millim. Type in B M.

SECT. II. Fore wing with yein 11 present.

- A. Hind wing of male with no bands or fringes of hair beyond lower angle of cell
 - a. Antennæ of male minutely ciliated, fore wing with no glandular swelling on middle of costa.
- 4661. Ambia colonalis, Brem Lep Ost-Sib p 67, pl 6, fig 4
 Oligostigma locuples, Butl Ill Het vn, p 97, pl 185, fig 7.
 Oligostigma dives, Butl Ill Het vn, p 97, pl 135, fig. 8.

Yellow and white Fore wing with two obscure dark-edged oblique, white bands on basal area, a curved antemedial white band with dark outer edge, a dark-edged white discocellular spot, a postmedial band recurved beyond lower angle of cell to the discocellular speck; a submarginal band commencing as a small subapical triangular spot, recurved above inner margin, and expanding into a patch below end of cell Hind wing with curved antemedial white band with dark outer edge; a discocellular black spot with white spots on its inner and outer edge, a curved postmedial dark-edged white band angled inwards on vein 2, a submarginal band expanding into a triangular spot below apex and sinuous towards inner margin, both wings with black marginal lines.

The form colonalis has the postmedial band of both wings broader than in dives, also the autemedial band of hind wing is broader, so

that the black discocellular spot falls on its outer edge. Hab. Amur. Dharmsála Exp 12-14 millim.

4662 Ambia palliolatalis, Swinh Trans Ent. Soc 1890, p 287

Bright fulvous yellow Fore wing with the markings white, edged by black scales, a subbasal line, a spot in cell, an oblique line from middle of costa to lower angle of cell; a large hoopshaped mark from cell to middle of inner margin, a postmedial line from costa to vein 4, where it is bent inwards for a short distance, the marginal area fuscous, with whitish specks on its inner edge. Hind wing whitish at base, the outer area yellow; a postmedial white line with dark inner edge recurved at vein 3 to angle of cell, then running to anal angle; a submarginal maculate dark-edged white line, a dark marginal line, both wings with the ciha black at base, white at tips

Hab Margharita, Assam, Rangoon Evp. 14 millim.

- 4663. Ambia instrumentalis, Swink A M N H. (6) xiv, p 209.
- d. White. Fore wing with three rufous and fuscous spots on base of costa, a rufous and fuscous fascia from middle of cell to

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costa before apex, and another from middle of cell along vein 2 to near margin, then bent upwards as a submarginal band to costa, and almost joining the subcostal fascia, thus forming an almost complete triangle, a marginal rufous and fuscous band from vein 2 to outer angle, then running along inner margin to middle. Hind wing with the medial area fuscous; the basal and outer areas white, a rufous and fuscous fascia on costa at apex.

Hab Khásis Erp 12 millim.

b. Antennæ of male with long cilia, fore wing with a glandular swelling on costa at middle.

4664. Ambia iambealis, Wil. Cat xix, p 950
Musotima fulvalis, Hmpsn Ill Het ix, p 180, pl 174, fig 25 (2)
Cymoriza albiflavidalis, Warr A M N H (6) xviii, p 223.

d. Orange-yellow; head and thorax much marked with white; abdomen ringed with white Fore wing with white spot at base; oblique subbasal and antemedial white bands, white streaks below



Fig 121 — Ambia iambealis, of

the costal gland and in end of cell, a postmedial white band bent inwards at vein 5 and running to the discocellulars, a black line on its outer edge; a dark-edged curved submarginal band bent inwards above inner margin, and running to the antemedial band, but intersected

by a yellow line, and connected with inner margin by a white spot before reaching it. Hind wing with subbasal and antemedial white bands, a postmedial white band with black line on its outer edge from costa to vein 5, where it emits a fascia to discocellulars, a black-edged band from vein 2 to inner margin, a sinuous black-edged submarginal white band from costa to vein 2

Q Fulvous yellow, suffused with fuscous. Fore wing with the recurved part of the postmedial band represented by an obtuse pale streak; the recurved part of the submarginal band replaced by a triangular mark between lower angle of cell and inner margin. Hind wing with the fascia from postmedial band obsolete on upperside

Hab. Khásis; Ceylon Exp 16-18 millim

c. Antennæ of male thickened and flattened, fore wing with a glandular swelling at middle of costa, with a hyaline fovea below it.

4665. Ambia marginalis, Moore, Lep Ath p 211; C & S no 4393. Cymoriza albicomma, Swinh A M. N H (6) xiv, p 210 Cymoriza fulvalis, Warr A M. N. H (6) xvii, p 224

Orange-yellow. Fore wing with indistinct dark-edged sinuous antemedial white band; a black-ringed white spot in end of cell-connected by a streak with the similarly coloured postmedial band, which is joined by another streak from beyond upper angle of

cell and terminates on vein 3, a narrow black-edged submarginal white band bent round above inner margin and expanding below end of cell Hind wing with black-edged white discocellular speck; a postmedial curved band from costa to vein 3, continued to inner margin as an obscure dark line, a narrow black-edged submarginal white band ending before anal angle, both wings with marginal series of black spots, the cilia black and white

Hab Sikhim, Khásis. Exp 22 millim.

- 4666 Ambia magnificalis, Swinh A M N H (6) xvi, p 299 Cymoriza interruptalis, Warr A M N H (6) xviii, p 224
- d Black-brown, tars ringed with white Fore wing with orange streak below base of median nervure, three white antemedial specks, the fovea large and white, a postmedial white band from costa to vein 5 and spot above inner margin, followed by a very indistinct fulvous band, enlarged and most prominent at inner margin, a fulvous marginal band with black edges, white marks on its inner edge, and dark streaks at the years. Hind wing with orange spot below base of median nervure, black discocellular spot, postmedial sinuous white band interrupted between veins 5 and 2; an orange fulvous marginal band with black edges, white marks on its inner edge, and crossed by dark streaks at the veins.

Exp. 20 millim. Hab Khásis

B (Opisthedeacta) Hind wing of male with two long brands beyond lower angle of cell on upperside between veins 2 and 4, and two short brands below their extremity.

4667 Ambia poritialis, Wik Cat xix, p 951, Mone, Lep Ceyl iii, pl 179, fig 11, C & S no 4394.

Yellowish white with fulvous markings, abdomen banded with fulvous, the terminal segment with two black spots and a white Fore wing with subbasal fulvous-edged white spot on costa, an antemedial white band with sinuous fulvous edges, a similar spot on costa, and band from subcostal nervure to below cell beyond it; a large fulvous-edged discocellular white spot, the medial part of costs spotted with fulvous and white, a postmedial triangular fulvous-edged white patch from below costs to vein 4; a sinuous fulvous-edged postmedial white band running out to an acute angle on vem 2 near the margin, then retracted to lower angle of cell and running obliquely to middle of inner margin, its inner edge defined by a prominent dark line from the costs to vein 2, a large apical fulvous-edged white spot, continued as a narrow maculate band to outer angle. Hind wing with subbasal fulvous spot, a nearly straight antemedial line, with a fulvous-edged triangular white patch beyond it from costa to vein 4, a sinuous postmedial dark-edged white band bent inwards at vein 4; a similar submarginal band angled inwards on vein 6 and dilated above anal angle; both wings with marginal fulvous band edged by black lines, the cilia fuscous.

Nilgiri specimens have the dark edges to the markings and the marginal band more prominent than specimens from other localities

Hab Nilgiris; Ceylon; Sumatra Evp 18-20 millim.

C. Hind wing of male with fringes of hair along veins 2, 3, 4 on underside, the apical area clothed with thick fulvous scales, the inner margin with a lobe fringed with very long hair, the anal area clothed with hair, abdomen with paired tufts of black hair from base, the hind tibiæ fringed with blackish tufts on outer side.

4668. Ambia lobophoralis, n. sp

of. Bright fulvous, head, thorax, and base of abdomen striped with white, the last with dark rings towards extremity. Fore wing with large white subbasal patch; black streaks on costa and subcostals to beyond end of cell; a white spot in end of cell and white streaks beyond upper and lower angles, two brown submarginal lines, with white patch inside it below costa, the lines curving inwards below vein 2 and enclosing a pale band between them, expanding into a large white spot above inner margin, the margin yellow; a dark line through the cilia. Hind wing more orange; a white basal patch with diffused fuscous on its outer edge, a white spot above the lobe, a series of black spots just inside the margin, with a black line on their inner side, obsolescent, except towards costa, a black streak with white spot inside it above anal angle, a black line through the cilia

Hab Sikhim (Pilcher), Nágas (Doherty) Evp. 18 millim. Type

in coll Elwes.

Genus OLIGOSTIGMA.

Oligostigma, Guen Delt & Pyr p 260 (1854)

Type, O junceale, Guen, from N America

Range The tropical and warmer temperate zones

Differs from Nymphula in the outer margin of hind wing being excised below apex, then lobed, the ocelli usually not so prominent.

In the typical species vein 10 of the fore wing sometimes arises from the cell

SECT I. Mid tibiæ of male without groove and tuft.

- A. Antennæ of male not thickened and flattened.
- a. Hind legs of male without tufts of hair on the coxe.
- 4669. Oligostigma hapilista, Swinh Trans Ent Soc 1892, p 20, pl i, fig 11.
 Oligostigma albidivisa, Warr A. M N H (6) xviii, p 221
- Q. Head and thorax fuscous and grey, abdomen fulvous, the basal segment white Fore wing with the basal half fuscous; the basal two-thirds of costa orange, a dark-edged triangular orange

mark arising from the subcostal nervure from middle to beyond end of cell, its apex curved and ending on vein 3 beyond the lower angle, where it is met by a curved submarginal dark-edged orange band, with a large orange patch between it and inner margin, where it is conjoined to the orange marginal band, which is defined by fine black lines; the ground-colour between the triangular patch, the submarginal and marginal bands, silvery white, calia fuscous, blackish at base. Hind wing with the base fuscous, followed by a broad silvery-white band, the outer half orange, with curved black inner edge; a fine curved jet-black postmedial line from costa to vein 2; fine black marginal lines and line through the cilia interrupted by four black spots, with white between them at veins 6 to 3

Hab. Khásis Exp. 22 millim.

4670. Oligostigma villidale, Wlk Cat xvii, p 485 Hydrocampa sacadasalis, Wlk Cat xix, p 968 Oligostigma unilinealis, Snell Tyd v Ent. xix, p 197, pl. 8, fig 2.

3. Differs from bilineals in the fore wing having no black line through the cell, a discocellular black spot, no line from discocellulars to postmedial band. Hind wing with no subbasal line, a waved black line just inside the margin

Hab. Margharita, Assam, Ceylon, Java, Borneo; Australia,

Fig. Evp. 18 millim

4671. Oligostigma fumibasale, n sp.

Q. Differs from bilineals m the thorax and abdomen being banded with fuscous. Fore wing suffused with fuscous to beyond the cell, and with no white fascia through the cell, no oblique white discocellular band meeting the postmedial white band, the submarginal band leaden colour; the orange areas of both wings deeper in colour. Hind wing with the postmedial white band more complete, a marginal black line, with a series of black specks just made it developed into three white-centered ocelli at the lobe, which is slight.

Hab. Puttalam, Ceylon (Pole). Emp 18 millim. Type in

BM.

4672. Oligostigma bilineale, Snell Tyd v. Ent xix, p 196, pl 8, figs 1 a-c, C. & S no 4406

Head white, thorax and abdomen white banded with fuscous. Fore wing white, the basal two-thirds of costal area fuscous; a fuscous line, with a few yellow scales on it, from base of inner margin to upper angle of cell, from which an oblique dark line runs to the angle of the dark-edged postmedial band, which at vein 2 is recurved to inner margin before middle; a submarginal dark-edged yellow band conjoined at vein 2 to the postmedial band, and at costa and inner margin to the black-edged yellow marginal band. Hind wing with the basal half white, with oblique black

subbatal and antemedial lines, the outer half yellow, with black inner edge, a black-edged postmedial white band from vein 6 to near inner margin, a marginal black line interrupted at the excision and lobe by four black spots with white patches between them.

Hab. Dharmsála; Calcutta. Exp 14 millim.

- 4673 Oligostigma angulipenne, Hmpsn Ill Het viii, p 139, pl 155, fig 6
- Q. Head and thorax ochreous and fuscous; abdomen tinged with fulvous, the basal segment white Fore wing fuscous, a fulvous fascia from base through the cell to beyond discocellulars, with black specks on it in cell and on discocellulars and a black line on its outer edge, an obscure fulvous fascia in interno-median interspace; a submarginal fulvous band terminating on vein 3, with black outer edge and a white band between it and the marginal orange band, which is defined by black lines. Hind wing with the base fuscous, a broad oblique antemedial white band, the outer area fuscous, with broad orange postmedial and marginal bands defined by black lines; a black line through the base of the cilia, interrupted by two black spots with white between them at the lobe; cilia of both wings fuscous

Hab. Nilgiris. Exp 18 millim

- 4674. Oligostigma parvale, Moore, P Z S 1877, p 616, C & S. no 4412
- Q. Orange-fulvous; head, thorax, and abdomen marked with white Fore wing with a white fascia on median nervure, met beyond the cell by the apex of a triangular patch which has its base on costa, a black-edged submarginal black band, narrowing and not reaching inner margin Hind wing with white fascia along basal part of costa, a curved black-edged white postmedial band, a black marginal line and single black spot at the projection.

Hab. Andamans; Borneo. Exp 14 millim.

- 4675. Oligostigma conspurcatale, Warr A M N H (6) xvii, p 202
- 5. Fuscous irrorated with grey. Fore wing with indistinct minutely waved antemedial dark line angled on median nervure; an obliquely sinuous postmedial line excurved between veins 7 and 3; a sinuous marginal fulvous band, inwardly edged by a black line with irregular white band inside it. Hind wing with waved dark ante- and postmedial lines; a series of black-and-white specks just inside the margin, which is tinged with fulvous Hab. Khásis. Exp. 16 millim.
- 4676. Oligostigma fuscifusale, Hmpsn III Het ix, p 177, pl 174. fig 28
- J. Rufous-brown Fore wing with obscure black speck at middle of cell and chestnut spot beyond discocellulars; the inner vol. iv.

medial area somewhat paler, a yellowish marginal band defined by fine black lines and with some whitish marks on its inner edge. cilia pale and fuscous Hind wing with the base dark fuscous brown, followed by a medial pale fuscous band, then a chestnut band; a marginal yellowish band defined by black lines and with white inside it except towards costs, the marginal black line interrupted by white at the excision and lobe, and with one black speck on the lobe.

Hab. Khásis, Ceylon Exp 14 millim

4677. Oligostigma nivemotatum, Hmpen III Het ix, p 176, pl 174. fig 32

Head and thorax dark brown and white, abdomen orange ringed with black, the basal segment white, the extremity fuscous wing fuscous, an orange fascia on postmedial part of costa, an obscure orange fascia through the cell, extending beyond it and with a black mark in end of cell; an oblique white band at middle of inner area from below vein 2 to inner margin ; a postmedial white patch between veins 6 and 2, a broad submarginal white band, rounded off below costs and tapering to above inner margin, a marginal orange band, with a series of black spots on it wing with the basal area white, with dark patch at base of inner area, the outer area greyish fuscous, with a medial line angled above vein 5 and defined on its outer side by orange, which is diffused outwards above middle to the lobe, a submarginal lunulate orange-and-black line running out to the margin at the lobe, a black line through base of caha interrupted at the lobe by two black spots, with white above them and orange inside them, cilia of both wings fuscous and grey.

Hab. Ceylon. Exp., 3 22, 2 26 millim

b. Hind legs of male with large tufts of curved hair extending backwards from the coxæ

4678. Oligostigma picale, Guen Delt & Pyr p 274, Hmpen Ill Het. 1x, pl 174, fig 23.

d. Head, thorax, and abdomen fuscous and white. Fore wing fuscous, with a large white patch covering the whole basal area except costs, and bounded by an oblique dark antemedial band arising from an orbicular mark in cell; the whole medial area



Fig 122 —Oligostigma picale, Q (Details of o)

white except the costs, and a large oval postmedial fulvous mark below costa with dark edges and dark centre, a postmedial line excurved between veins 5 and 2, then bent inwards to below angle of cell, the area beyond it

fuscous towards inner margin, and with a large white patch from costs to vein 4 and small spot below vein 2; a marginal orange band defined inwardly by a black line and outwardly by a maculate line. Hind wing with the basal half white, with dark patch on base of inner area, the outer half greyish fuscous, with slightly sinuous postmedial fulvous band, a marginal series of black spots; two black spots and two white specks at the lobe, with orange inside them; cilia of both wings fuscous

Q with the whole of fore wing fuscous, obscuring the markings as far as the white submarginal patch, except a white patch on

middle of inner margin

Hab. Ganjam, Ceylon. Exp., of 14, Q 16 millim.

B Antennæ of male thickened and flattened by appressed serrations.

4679 Oligostigma dianale, Hmpsn Ill Het 1x, p 177, pl 174, fig 27.

J. Head and thorax fulvous, the vertex of head white, the prothorax and a spot on metathorax white, abdomen orange, the extremity white Fore wing fulvous, the costal area and apical third of wing orange, the cell striated with silvery grey; a grey fascia below median nervure, a white fascia on middle of inner margin, a postmedial black spot on costa, a postmedial oblique white line from subcostals to vein 4, a submarginal white band with black outer edge; a marginal series of black spots. Hind wing fulvous, a broad oblique white antemedial band, the apical area tinged with orange, with a silvery-white spot, three black spots on the lobe, the upper one with silvery-white centre; the anal area orange, cilia of both wings pale grey, with silvery bases on hind wing, except towards anal angle

Hab. Ceylon Exp 14 millim.

SECT. II. Mid tibiæ of male with a tuft of long hair contained in a groove

A. Male without tufts of hair on base of mid and hind femora.

4680. Oligostigma pulchellale, Hmpsn Ill Het ix, p 178, pl. 174, fig 30

d. Head white; the palpi dark rufous; thorax dark rufous and white. Fore wing with a slight white line on basal half of costa, a subcostal yellow fascia, a silvery fascia in cell, a dark-edged yellow fascia below median nervure; the inner area white, with a curved dark-edged yellow fascia from near base of inner margin to outer angle, enclosing a dark mark on middle of inner margin, a postmedial dark-edged fulvous triangular patch obscurely differentiated on its inner side from the basal fasciated area, and joined at vein 3 by a curved fulvous submarginal band, with a white patch inside it and a white band beyond it, a marginal yellow band defined by fine black lines. Hind wing white, with a dark rufous patch on basal inner area, a diffused rufous patch in end of cell joined by a curved line from costa; an ill-defined sinuous rufous submarginal band conjoined to a patch on the lobe,

which has three black spots with white lunules above them; a fine marginal black line, cilia of both wings white intersected with fuscous

Hab Khásis; Ceylon Exp 12 millim

- B Male with short tufts of hair from base of mid and hind femora, hind tibia, and on 5th segment of abdomen below.
- 4681 Oligostigma ornatum, Moore, Lep Ceyl III, p 299, pl 181, fig 11, C & S no 4424

Silvery white, palpi and shoulders dark brown, abdomen with a yellow band on 2nd segment. Fore wing with the costa fuscous, a yellow fascia on medial part of inner area expanding outwardly; an oblique dark line from lower angle of cell to inner margin, a postmedial black spot on costa; a dark-edged golden-yellow lumile beyond discocellulars, with a fuscous line from its lower edge to inner margin, a submarginal golden-yellow band tapering to inner margin and with dark outer edge, a marginal golden band defined by fine black lines. Hind wing with oblique subbasal golden-yellow band, a postmedial golden-yellow band from below apex, its medial part defined by fuscous lines and conjoined below apex to the marginal yellow band, which is defined by fine black lines and below the lobe has three black spots, the two upper with white lumiles above them

Hab. Ceylon Exp 24 millim.

- O. The tufts on hind femora developed into large tufts directed towards the base and enclosing a hollow, abdomen without tufts
- 4682 Oligostigma bifurcale, Pryer, Cut Ent n, p 232, pl 4, fig 4
- d' Head, thorax, and abdomen yellow and white Fore wing white, with the costal half to end of cell suffused with fuscous, an obscure fuscous triangular postmedial mark with its apex on inner margin, its inner limb with a black speck on costa and enclosing a yellow patch beyond discocellulars, a yellow fascia on middle of inner area expanding outwardly, a submarginal yellow band with fuscous outer edge terminating above inner margin and with a white band between it and the marginal yellow band, which is defined inwardly by a black line, outwardly by a series of black strigge. Hind wing white at base, followed by a broad black-edged subbasal yellow band, then a white medial band, the outer area yellow, with black inner edge, a small white apical patch, incomplete waved black submarginal and marginal lines, interrupted at the lobe by three black spots, the uppermost with a white spot inside it. Hab. Chekang, China, Khásis; Shán States. Exp. 24 millim.

Genus AULACODES.

Aulacodes, Guen Delt & Pyr p 258 (1854) Hydrophyss, Guen Delt & Pyr p 259 (1854).

Type, A. achmialis, Guen., from Brazil.

Range. Neotropical region. Oriental region to Celebes

Palpi upturned and hardly reaching vertex of head, the 2n joint fringed with long hair in front, the 3rd short, with a small triangular tuft, maxillary palpi as long as labial and dilated with scales at extremity, antennæ of male thickened and flattened, with appressed serrations; occili usually indistinct, legs very long and slender, mid tibiæ of male with a tuft of long hair contained in a fold, wings long and narrow. Fore wing with vein 3 from angle of cell, which has the lower part extremely produced and the discocciliulars very oblique; 7 straight and well separated from 8, 9, 10; 11 from near end of cell, touching or anastomosing with 8, 9, 10. Hind wing with vein 3 from before lower angle of cell, which is very much produced, and the discocciliulars oblique, 6, 7 from upper angle, 7 anastomosing with 8, which is much curved, the outer margin excised below apex and lobed at vein 5

In the typical species the secondary sexual characters consist of fringes of hair on fore coxe and femora, and a very long fringe on

each side of medial spur of hind tibiæ.

- SECT I Fore and hind wings with veins 4, 5 stalkel, antennæ of male with no process on basal joint, a small fovea in end of cell of fore wing
- 4683. Aulacodes colonialis, Guen Delt & Pyr p 262, Snell Tyd v. Ent xix, p 198, pl 8, figs 3 a-d, C & S no 4407
- d Head, thorax, and abdomen whitish, yellow, and fulvous Fore wing white, with the costal area fulvous, a broad yellow fascia on inner area, a curved yellow fascia from upper angle of cell to vein 2, where it is joined by a submarginal band; a dark fulvous band between them from subcostals to vein 4, a yellow marginal band defined by fine black lines. Hind wing white, with broad oblique yellow band from below apex to middle of inner margin, where it expands; a yellow marginal band defined by fine black lines from the lobe to anal angle, and with three black spots below the lobe, the two upper with large silvery-white pupils.

Hab Sikhim; Bombay Evp 24 millim.

- SECT II Fore and hind wings with veins 4, 5 from angle of cell; antennæ of male with a curved clubbed process from inner side of basal joint
- A. Male with no tuft on hind femora, fore wing with a small costal fold at hase and no costal fringe, the tuft of scales confined to end of cell and no sparse fringe on median nervuie
- 4684. Aulacodes sejunctalis, Snell Tyd v Ent xix, p 207, pl 9, fig 11, C & S no 4418
 Cataclysta delicata, Moore, Lep Ceyl ni, p 556, pl 215, fig 5;
 C & S no 4419
 - Differs from peribocalis in the postmedial triangular patch of

fore wing being narrow and more elongate. Hind wing with a small dark mark at base of inner area widely separated from the broad yellow postmedial band, the silvery-white specks placed between the black spots instead of on them

Hab Dharmsála, Sikhim; Ceylon. Exp., of 18-30, 222 millim.

4685. Aulacodes plicatalis, Wll. Cat xxxiv, p 1332
Oligostigma simplicialis, Snell Tyd v. Ent xix, p 201, pl 8, fig 6

Head, thorax, and abdomen white tinged with fawn colour. Fore wing white, with the costa fawn-coloured, some obscure brownish suffusion in cell and on median nervire, a curved yellow fascia from inner margin near base to near outer angle, where it is joined by a triangular fulvous patch from costa beyond middle with dark sinuous edges and a dark-edged fulvous submarginal band, a marginal yellow band defined by fine black lines. Hind wing white, a dark-edged yellow patch on inner area near base, a broad curved dark-edged yellow postmedial band, diffused outwards to the margin below apex, a marginal yellow band defined by fine black lines and with three white-centred black spots on it between veins 5 and 2.

Hab Dharmsála; Sikhim, Java, Celebes Exp. 28-36 millim

- B. Hind femora of male with a thick tuft of short hair near extremity
- a. Fore wing with a slight costal fringe of hair on upperside; a thick ridge of large scales from base through the cell, widening towards end of it.
- 4686. Aulacodes hamalis, Snell Tyd v Ent xix, p 199, pl. 8, fig. 4a-c, C & S no 4410
 Cataclysta ochripicta, Moore, Lep Atk p 209, C & S no 4423

Differs from pheatals in the markings being more orange and much more extensive. Fore wing with the postmedial triangular mark shorter and ending above the fascia on inner area, which has no dark edges. Hind wing with the medial white area very much reduced, the postmedial band with dark inner edge in specimens from the N.W. Himalayas, without dark edge in specimens from Sikhim and the Nilgiris, the marginal band with two black spots, the lower spot in Nilgiri specimens without a white centre

Hab. NW Himalayas, Sikhim; Nilgiris Exp 22-26 millim-

4687. Aulacodes melanops, n sp.

o. Orange. Fore wing with a small tuft of black hair at base, an S-shaped dark line beyond cell from below costa to vein 2, with a triangular whitish patch on its outer edge, a submarginal white band from below costa ending in a point on vein 2, defined by

fuscous on inner side and a black line on outer, a marginal black line; the cilia intersected with black. Hind wing with wedge-shaped whitish medial band defined by fuscous lines from costa to lower angle of cell, four large white-centred black spots on margin on a pale patch, defined on inner side by a fuscous submarginal line which runs across the apex and is angled inwards on vein 1

Hab Sikhim (Pilcher) Evp 28 millim. Type in B M

- b Fore wing of male with sparse fringe of long hair from median nevire, the tuft of large scales confined to the end of cell
- 4688 Aulacodes peribocalis, Wlk Cat xvii, p 446, C & S no 4426. Cataclysta halialis, Wlk Cat xvii, p 447, C & S no 4421 Cataclysta sabrina, Pryer, Cist Ent ii, p 232, pl 4 fig 3 Oligostigma papulalis, Snell Trans Ent Soc 1890, p 640

Head, thorax, and abdomen white and pale yellow. Fore wing white, with the costal area yellow tinged with fulvous, the tuft of scales in cell white or fuscous, vein 2 streaked with yellow, an oblique triangular dark-edged yellow mark from costa beyond middle to vein 2, a dark-edged curved yellow fascia from near base of inner margin to outer angle, a submarginal yellow band with dark outer edge from costa to vein 2, a marginal yellow band

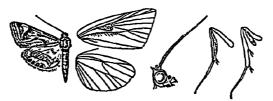


Fig 123 -Aulacodes peribocalis, &

defined by fine black lines Hind wing white, with yellow subbasal patch on inner area conjoined to a very broad curved submarginal yellow band, with a fuscous V-shaped mark between them, the outer edge of the submarginal band dark, four white-centred black spots on a yellow marginal line between veins 5 & 1c

The markings of fore wing, except the fascia on inner area and

the marginal band, sometimes fulvous

Hab Aden, China, N.W & E Himalayas; Nilgiris, Burma. Exp. 28-36 millim.

4689. Aulacodes saturatalis, Snell Trans Ent Soc 1890, p 639

Differs from plicatals in being bright orange. Fore wing with no dark line on inner edge of the submarginal orange band. Hind wing with no dark edge to the subbasal patch and no dark inner edge to the broad postmedial band, the costal portion of which is suffused over the whole apical area, embracing the three occilate spots. Hab. Sikhim. Exp., 6 20, \$\times\$ 22-30 millim

4690. Aulacodes dominalis, Wlk Cat xxxiv, p 1837, C & S no 4420 Oligostigma peribocalis, Hmpen Ill. Het viii, pl 156, fig. 4, (nec Wlk).

Differs from peribocalis in the markings of fore wing being fulvous, the marginal band and usually the fascia on inner area yellow. Hind wing with a small dark patch at base of inner area widely separated from the postmedial band, the marginal black spots elongate and indented below the white centres, the lowest spot obsolescent and without white centre.

Hab. Nilgiris. Eap, of 24-30, \$\times\$ 40 millim.

Genus PARTHENODES

Parthenodes, Guen Delt & Pyr. p 252 (1854)
Paracymoriza, Warr. A M. N H (6) vi, p 479 (1890)

Type, P hydrocampalis, Guen., from Brazil

Range Neotropical and Ethiopian regions; India, Burma; Sumatra, Java

Palpi porrect, straight, and projecting about the length of head, the 2nd joint fringed with hair below, the 3rd short and naked, maxillary palpi large and triangularly scaled, frons rounded, antennæ of male thickened and flattened. legs naked, the outer spurs about two-thirds length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10 Hind wing with vein 3 from angle of cell, which is about half the length of wing; 4, 5 approximated for a short distance, 6, 7 from upper angle.

- SECT. I. (Parthenodes) Mid tibiæ of male with no fold or fringe of hair, hind coxæ without tufts, wings with the outer margin evenly rounded.
- 4691 Parthenodes olivalis, Hmpsn III Het viii, p 140, pl 155, fig 8(δ)
 Paracymoriza dentifascialis, Hmpsn. III. Het viii, p 141, pl 155, fig 21(Ω)
- d. Ohve-brown suffused with fuscous and grey, abdomen with pale rings. Fore wing with obscure curved subbasal and ante-medial pale lines, the latter dentate below vein 2, a white spot on discocellulars, with diffused black patch beyond it, a black-edged white postmedial line minutely waved from costa to vein 3, then retracted to lower angle of cell and strongly angled outwards above inner margin; a series of black and white submarginal lumiles, the 3rd from costa expanding into a large white spot. Hind wing fuscous; a dark discocellular spot with oblique line from it to near anal angle, the postmedial line excurved from costa to vein 2, then incurved and almost joining the antemedial line, a dark submarginal line, both wings with the base of cilia black.
 - 2. Darker, the thorax more suffused with white Fore wing

with the lines and submarginal lunules prominently white, the medial area suffused with white, on which the black patch beyond the cell stands out prominently and with a crescentic white mark below it. Hind wing with the medial area whitish, the two lines well separated towards inner margin, some white on inner edge of submarginal line.

Hab Nilgiris Evp, 3 36, 2 52 millim

4692 Parthenodes exsolvalis, Snell Midd-Sum 1v, pt 1, p 76 Cymoriza rivularis, Moore, Lep Ath p 210, pl 7, fig 8, C & S. no 4395

Red-brown suffused with fuscous, palpi white below, head variegated with white, abdomen ringed with white. Fore wing with obscure dentate white subbasal line, an oblique waved white medial line, a white lunule in end of čell, a double spot below it; the postmedial white line angled outwards below costa, excurved to vein 3, retracted to angle of cell, waved to inner margin, and with three short white streaks inside it beyond the cell, a submarginal series of white spots, the 3rd from apex largest, no spot between veins 4, 5. Hind wing fuscous, with white ante- and postmedial lines almost meeting above anal angle, the latter angled outwards at vein 3 and the space between them white, leaving narrow dark bands inside the lines; a submarginal series of white spots except between veins 4, 5, the spot between veins 2, 3 largest, and those towards anal angle conjoined

Hab. Sikhim, Khasis; Bernardmyo, Burma, Sumatra Exp.,

♂ 24, ♀ 36 millin.

4693. Parthenodes stellata, Warr A M N H. (6) xvn, p 203.

- d Head, thorax, and abdomen black with a few grey scales, the last with the terminal segments fulvous. Fore wing with the basal area blackish, bounded by a dark-edged white line angled in the cell, the rest of the wing fulvous, whitish towards costa, and with a very large apical black patch extending down to vein 3, a postmedial sinuous pale line recurved at vein 2 to lower angle of cell, a submarginal series of white spots prominent towards apex; cilia whitish, fuscous at apex and middle. Hind wing pale fulvous, the basal area blackish, pale waved subbasal ante- and postmedial lines, a discocellular black spot, a submarginal series of white marks, cilia white intersected with pale brown
 - Q with the fore wing almost wholly suffused with black. Hab Khásis. Exp. 16 millim
- 4694 Parthenodes albifascialis, Hmpsn Ill Het viii, p 140, pl 156, figs 1-9
 Paracymoriza semialbida, Warr A M N H (6) xvii, p 203
- d. Head, thorax, and abdomen black and white Fore wing black, with curved white subbasal and antemedial lines; a broad

medial white band, a discocellular fulvous spot; the veins beyond the cell streaked with white; a dark-edged white postmedial line nearly straight from costa to vein 2, then retracted to lower angle of cell, and slightly angled outwards on vein 1, some fulvous on costa towards apex, the inner area fulvous beyond the postmedial line. Hind wing black, with broad medial white band defined on inner and outer sides by a black-edged white line, the outer angled outwards on vein 2, the outer area fulvous below middle. Both wings with narrow black-edged fulvous marginal band, with large white spot on its inner side below apex of fore wing and two spots above outer angle, hind wing with a white line below the costa and a maculate band from vein 2 to near anal angle

2 with the fore wing uniform black except the apical fulvous and white patches, the two white spots above outer angle, and the

marginal fulvous band

Hab Khásis, Nilgiris Exp, & 22, 2 26 millim

4695. Parthenodes nigriplaga, Swinh A M N H (6) xiv, p 209-

d Head and thorax black, abdomen fulvous, ringed with black; wings black, with orange marginal band with a fine black line on its inner edge, inside which is a maculate white line, a marginal series of black specks, a marginal black line and line through the cilia. Fore wing with white spots in and beyond end of cell below the subcostals. Hind wing with white spots at lower angle of cell and orange patch at anal angle. Underside whitish towards base of wings

Hab. Khásis Exp 22 millim

SECT II (Paracymoriza) Mid tibis of male dilated, with a fold containing a fringe of hair, tufts of hair from base of hind coxe, wings with the outer margin somewhat excurved at middle

4696. Parthenodes mextricata, Moore, Lep. Ath p. 210, pl 7, fig 7; C & S. no 4390

Reddish brown suffused with fuscous, head and thorax irrorated with grey, abdomen tanged with white. Fore wing with white streaks from base below costa, in and below cell, the two lower extending to the obliquely curved antemedial line; a black discocellular lunule, the postmedial white line angled below costa, then incurved to vein 5, excurved to vein 2, retracted to lower angle of cell, and strongly angled outwards on vein 1, a sinuous white submarginal line giving off two fascise above middle, the upper crossing the postmedial line, the lower terminating at it, the outer area from costa to vein 3 suffused with black. Hind wing with the medial area pale, defined on inner side by an oblique fuscous-edged pale line and on outer side by a similar sinuous line bent inwards at vein 3 and terminating at anal angle, a

submarginal white line, maculate and interrupted towards costa; both wings with a narrow black-edged fulvous marginal band Hab Sikhim Evp. 36 millim.

4697. Parthenodes vagalis, Will Cat. xxxiv, p 1530, C & S no 4401.

Ohve-brown suffused with fuscous, head and thorax much marked with white, abdomen ringed with white. Fore wing with the basal area suffused with white; a subbasal white line bidentate



Fig 124 -Parthenodes vagalis, d 1.

in cell, a sinuous dark-edged antemedial white line; the medial area white, a dark-edged white postmedial line angled outwards below costa, running with a double curve to vein 2, then retracted in another double curve to lower angle of cell, and very acutely angled outwards above inner margin, some white on its inner side below costa, a minutely waved dark-edged submarginal white line sending two fasciæ inwards above middle. Hind wing with obscure white subbasal line; the medial area white, with olive discocellular spot, defined on inner side by a black-edged oblique pale line from cell to inner margin, on outer side by a similar line with fuscous suffusion beyond it, angled outwards on vein 3 and terminating at anal angle, a submarginal black-edged white band with a small dentition at vein 6, interrupted by a black spot at vein 4, and expanding slightly towards anal angle

Hab. Punjah, Dharmsála, Nilgiris, Java Erp., & 26, 2 26-

32 millim

4698 Parthenodes aurantialis, Swinh A M N H (6) xvi, p 304.

Differs from vagalis in the ground-colour being bright orange, the black lines and white markings more sharply defined. Fore wing with the angle of the medial band on vein 1 more acute; the white streaks from the submarginal band almost touching the postmedial curved band. Hind wing with a prominent black spot on the submarginal band opposite the angulation of the margin, both wings with prominent orange marginal band; the cilia white, with black line at base

Hab Khásis. Exp 22-30 millim

*4699. Parthenodes ? gangeticalis, Led Wien ent Mon 1863, pp 453, 485, pl 18, fig 5 (nec 4), C & S no 4398

Pale brown, the wings suffused with golden yellow. Fore wing with dark-edged subbasal white band running out to a very acute angle on median nervure and slightly angled on vein 1; an ante-

medial band slightly excurved from costs to median nervure, very highly excurved below the cell, a submarginal band curved from costs to vein 2, then recurved to upper angle of cell and running with two curves to outer angle, an irregular series of white marginal blotches sending two streaks across the submarginal band below the apex. Hind wing with deutate subbasal line, a darkedged sinuous antemedial white band, a darkedged white band arising from the apex, curving round to costs near the antemedial band, then sinuous and joining the antemedial band just above inner margin, some irregular white spots on the margin

Hab "India" Exp. 17 millim

Genus DAULIA.

Dauha, Wih Cat xix, p 975 (1859) Girtexta, Swinh Trans Ent Soc. 1890, p. 285.

Type, D afralis, Wlk.

Range. Bhutan, Assam, Nilgiris, Burma, Borneo

Palpi porrect, about twice as long as head, triangularly scaled, and the 3rd joint hidden by hair; maxillary palpi dilated with scales, from rounded, antennæ minutely annulated, mid tibiæ of male with a tuft of hair in a fold, hind tibiæ with the outer medial spur minute. Fore wing with vein 3 from angle of cell, 4, 5 approximated for a short distance in male, which has slight foveal depressions in the membrane in end of cell and beyond discocellulars above and below vein 6, 7 straight and well separated from 8, 9, 10. Hind wing with veins 4, 5 closely approximated for some distance, 3 being also approximated to them in male, the cell short, 6, 7 from upper angle.

4700 Daulia afralis, Wik. Cat xix, p 975
Girtexta argentuosalis, Swinh Trans Ent Soc 1890, p 286

Bright orange-yellow; abdomen with a silvery dorsal mark on



Fig 125 — Daulia afralis, 6. }

1st segment and dark bands towards extremity. Fore wing with a silvery costal fascia from base to middle, silvery fascia on median nervure and vein 1, an antemedial silvery band and medial band from cell to

inner margin; short fascie from discocellulars along subcostals and vein 5, a postmedial spot above inner margin, a postmedial band from costa to vein 3, a submarginal band from below costa to vein 2 and an oblique streak near outer angle. Hind wing pale, the area between veins 2 and 5 yellow with a medial silvery spot, two postmedial spots, and a submarginal band continued to apex, the area at anal angle yellow, with a silvery spot with dark edges, both wings with a fine marginal dark line, the cilia who

Hab. Bhutan, Nilgiris; Burma; Borneo Exp. 16-22 millim.

4701 Daulia aurantialis, n sp

d Differs from afrahs in being much brighter orange, fore legs orange, the tarsi pure white. Fore wing with no silvery streaks from base on costa, or median nervure or above inner margin, an indistinct yellow subbasal band, the medial band yellow with a few silver scales on its edges, three black specks on costa, the silvery streaks beyond the cell obsolescent, the postmedial spot above inner margin oblique, the spot near outer angle small, and all the markings of outer area less prominently silvery cilia orange at base. Hind wing without the pale areas, an oblique medial yellowish band terminating at anal angle, the postmedial and submarginal bands continued to costa, cilia orange at base.

Hab Nagas (Doherty) Exp 20 millim Type in coll Elwes

Genus TALANGA

Talanga, Moore, Lep Ceyl 111, p 300 (1885)

Type, T scrpunctalis, Moore

Range Oriental and Australian regions

Palpi short, porrect, and fringed with long hair below, the 3id joint prominent, maxillary palpi filitorm and nearly as long as the labial, from rounded, antennæ nearly simple, tibiæ with the outer spurs less than half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10. Hind wing with the cell short, veins 3, 4, 5 from angle of cell, 6, 7 shortly stalked

4702 Talanga sexpunctalis, Moore, P Z S 1877, p 616, pl 60, fig 12, C & S no 4414
Glyphodes lomaspilalis, Snell Tyd v Ent xxii, p 223
Cataclysta nympha, Butt P Z S 1880, p 683

Head, thorax, and abdomen pale ochreous, palpi and shoulders fuscous, anal tuft of male black. Fore wing bright yellow, a brown fascia on basal part of costa, silvery-white fasciæ in cell



Fig 126 - Talanga sexpunctalis, of

and above vein 1, on which there is a dark streak, a large brown triangular patch from middle of costa, with the silvery blue discocellular line on it and a silvery-white band on its outer edge, brown patches on costa before and at apex, with curved silvery-white bands ex-

tending from them to vein 2, a fine marginal black line, the ciba white. Hind wing yellowish white, a bright yellow band beyond lower angle of cell between veins 5 and 2, with silvery blue on its outer edge; a bright yellow patch on middle of outer area, with two black spots below it centred with metallic colours, above the spots are some black and metallic specks on the margin, and outside

them are four black spots with white spots between them, and the

cilia at that point cupreous fuscous

Hab Formosa, Dharmsála, Sikhim, Bombay, Nilgiris, Ceylon, Andamans, Borneo, Celebes, New Britain, New Hebrides Evp. 20–24 millim

Genus NIPHOSTOLA, nov.

Type, N micans, Hmpsn. Range Khásis, Nágas

Palpi upturned, the 2nd joint thick and reaching vertex of head, the 3rd minute and blunt maxillary palpi well developed and slightly dilated with scales, from rounded, antennæ of male somewhat thickened and flattened, tibiæ smooth, the spurs long and equal. Fore wing with the apex rounded, vein 3 from before angle of cell, 7 straight and well separated from 8, 9, 10, the inner margin slightly lobed at base. Hind wing with the costa lobed at base, veins 3, 4, 5 from angle of cell, 6, 7 stalked, 7 anastomosing with 8 almost to apex or becoming coincident with it.

4703 Niphostola micans, n sp



Fig 127 -Niphostola micans, &

d Pure glittering white, palpi tinged with fuscous at sides, hind wing with the apical area slightly tinged with fuscous, underside of fore wing fuscous

Hab Khásis, Nágas (Doherty) Evp 20 millim Type

ın coll Elwes

Genus PERISYNTROCHA

Perisyntrocha, Mey: Trans Ent Soc 1894, p 469

Type, P alienalis, Wlk, from the Malayan subregion Range Sikhun, Nágas Australia, New Britain.

Differs from Bradina in the 2nd joint of palpi being slightly fringed with scales in front, both wings with veins 4, 5 on long stalks

4704 Perisyntrocha ossealis, n sp

d Pale glossy ochreous, abdomen ringed with fuscous Fore



Fig 128
Perisyntrocha ossealis, d }

wing with the costa black, black streaks on costal and subcostal nervures, a discocellular band expanding at lower angle of cell, a sinuous postmedial black band bent inwards above inner margin and continued as a fascia almost to base, a marginal black line

expanding into a patch at middle Hind wing with curved post-

medial black band ending on inner maigin near anal angle, a marginal black line widening to costa

Hab Sikhim (Dudgeon), Nagas (Doherty) Erp 20-22 millim

Type in coll Elwes

Genus STEGOTHYRIS.

Stegothyris, Led Wien ent Mon. 1863, p 427

Type, S fasciculalis, Zell, from S Africa

Range S Africa, Himalayas, Burma, Malayan subregion to Sambawa

Differs from Biadina in veins 3, 4 of fore wing being stalked; male with a fan of scales in upper angle of cell below

4705 Stegothyris diagonalis, Guen Delt & Pyr p 201, C & S no 4301

Stegothyris transversalis, Led Wien ent Mon 1863, pp 427, 482, pl 16, fig 5

Botys plagalis, Moore, P Z & 1867, p 96, C & S no 4074

White, palpi above and from blackish, shoulders golden brown,



Fig 129 Stegothyris diagonalis, &

abdomen slightly vellowish above towards extremity, some diffused golden brown on costal area of fore wing and outer area of both wings, narrowing to anal angle of hind wing, an oblique line from costa of fore wing beyond middle to anal angle of hind wing

Hab NW & E Himalayas, Burma, Sumatra, Java, Sambawa Exp 24 millim

Genus HYMENOPTYCHIS

Hymenoptychis, Zell K Vet -Ak Handl 1852, p 64 (1854). Sylbatis, Will Cat xxvii, p 119 (1863)

Type, H sordida, Zell

Range S Africa, Bengal, Ceylon, Burma, Malayan subregion

and Pacific groups

Palpi upturned, reaching vertex of head, the 3rd joint short, with a small triangular tuft in front, maxillary palpi minute and filiform; frons rounded, autennæ of male thickened and flattened, legs long and slender, abdomen very long, especially in male, which has the terminal segment long and pointed Fore wing long and narrow, the apex rounded, cell less than half the length of wing, vein 3 from close to angle of cell, 4, 5 approximated for some distance, 6 from below upper angle, 7 straight, in male the cell very short, 6 bent down and approximated to 4, 5, 7 bent down at middle, a fringe of hair on subcostals below from angle of cell

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halfway to apex Hind wing with the cell about one-fourth length of wing, vein 3 from angle, 4, 5 approximated for some distance, 6, 7 stalked

4706 Hymenoptychis sordida, Zeil K Vet -Ak Handi 1852, p 65, Led Wien ent Mon 1863, p 426, pl 16, fig 2 Syrbatis tapuliformis, Wik Cat xxvii, p 120 Botys pterophoralis, Wik Cat xxxii, p 1413

Dull red-brown Fore wing with slight semihyaline streaks in the interspaces and traces of dark dentate ante- and postmedial lines



Fig 130 -Hymenoptychis sordida, o

Hab S Africa, Calcutta, Ceylon, Rangoon, Malacca, Boineo, Marshall and Ellice Islands Exp, 3 28, 2 30 millim

Genus TATOBOTYS.

Tatobotys, Butl P Z S 1880, p 086
Decticogaster, Snell Tyd i Ent. xxiii, p 230 (1880)
Cometura, Meyr Trans Ent Soc 1880, p 226

Type, I' janapalis, Wlk

Range Oriental region and eastwards to the Solomons

Palpi upturned and not reaching vertex of head, the 2nd joint moderately fringed in front, the 3rd short and blunt, maxillary palpi extremely minute, frons rounded, antennæ rather longer than fore wing and somewhat thickened, legs long and slender, the outer spurs about half the length of inner, abdomen extremely long in male, with very long anal tuft. Fore wing with the costa arched towards apex, the outer margin very oblique, veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10 Hind wing with the cell nearly half the length of wing, veins 3, 4, 5 from angle; 6, 7 from upper angle

4707 Tatobotys janapalis, Wil. Cat xviii, p 676, C & S no 4096.
Botys linsalis, Wil. Cat xix, p 1003
Botys cunealis, Wil. Cat xix, p 1420
Tatobotys aigillacea, Butl. P Z & 1880, p 686
Hedylepta gemella, Moore, Lep Ath. p 208, C & S no. 4344

Rufous-brown slightly suffused with fuscous Fore wing with the basal costal area fuscous, an obscure minutely dentate antemedial black line, a spot in cell, both wings with a black line on each side of the discocellulars, a highly dentate postmedial line slightly bent outwards between veins 5 and 2, then retracted to angle of cell, a marginal line, and line through the cilia



Fig 131 — Tatobotys janapalis, & 1

Hab Formosa, Ceylon, Rangoon, Solomons. Evp 16-20 millim.

4708. Tatobotys varanesalis, Wik Cat xviii, p 719
Decticogaster zonulalis, Snell Tyd v Ent xxiii, p 231, and xxvii, p 40, pl 3, fig 11

& Fiery orange, head and thorax slightly marked with fuscous; abdomen with black dorsal bands on first two segments and silvery bands on the others, the anal segment white, striped with black Fore wing with two oblique black subbasal bands, two spots in the cell, a Y-shaped medial band not reaching inner margin, an obliquely curved postmedial band diffused along costa and joining the broad black outer area. Hind wing with two black lines from near base of cell to near anal angle, a V-shaped medial band from costa to vein 2, a triangular patch from apical part of costa with its apex on vein 2, a marginal black line

Hab Rangoon, Borneo. Evp. 18 millim

Genus ALMONIA.

Almonia, Wih Cat xxxiv, p 1495 (1865) Dodanga, Moore, Lep Ceyl in, p 331 (1886)

Type, A truncatalis, Wlk

Range, S India, Ceylon; Java, Celebes

Palpi upturned, the 2nd joint broadly and roundly scaled in front, the 3rd minute and naked; maxillary palpi filiform, frons rounded, antennæ annulated with rings at the joints; abdomen of male with the terminal segments flattened, the last segment long and the anal tuft large, tibiæ with the outer spurs considerably less than half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 6 from well below upper angle, 7 well separated from 8, 9, 10. Hind wing with the outer margin excised at middle, and the anal area produced into a large lobe, veins 3, 4 from angle of cell and approximated for a short distance, 5 from above the angle, 6, 7 stalked, male with a tuft of long hair from base of inner margin.

- SECT I (Almonia) Hind tibis of male with immensely developed tufts of hair from medial spurs to extremity on both inner and outer sides
- 4709 Almonia truncatalis, Wlk Cat xxxiv, p 1440 Almonia onustalis, Wlk Cat xxxiv, p 1495
- d Black-brown, palpi below and throat white, the tarsi whitish, abdomen with the flattened segments fringed with leaden scales, the anal tuft ochieous. Fore wing with obscure black spot in cell and discocellular lumile, the discal area darker and more



Fig 132 -Almonia truncatalis, & }

thickly scaled, traces of a curved postmedial line on both wings, more prominent on underside Hind wing with the tuft on inner margin paler

Hab Ceylon, Java, Sula Islands, N. Celebes Evp 32 milhm

SECT II (Dodanga) Hind tibiæ of male without tufts of hair

A. Hind wing of male with a large patch of rough brown scales on anal lobe below

- 4710 Almonia lobipennis, Moore, Lep. Ceyl in, p 832, pl. 182, fig 3; C & S no 4126
- d Differs from truncatalis in the tuft on inner margin of hind wing being black

 Hab Ceylon Erp 24 millim.
 - B. Hind wing of male with no sexual patch below
- 4711. Almonia cristata, Hmpsn Ill Het viii, p 136, pl 156, fig 7
- d. Differs from truncatalis in having no leaden scales on the abdomen, the anal tuft black

Hab. Ganjam, Nilgiris. Emp 28 millim

Genus BRADINA.

Bradina, Led Wien ent Mon 1863, p 424 Erikta, Led Wien ent Mon 1863, p 426 Pleonectusa, Led Wien ent Mon 1863, p 426 Physematia, Led Wien ent Mon 1863, p 447

Type, B. unpressales, Led, from Amboina.

227 BRADINA

Japan, Oriental and Australian Range Ethiopian region

regions

Palpi upturned, the 2nd joint broadly rounded, with scales in front, the 3rd short and blunt, maxillary palpi as long as labial; frons rounded, antennæ annulated, legs long and slender, the outer spurs half the length of inner, abdomen of male long and slender, wings narrow Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, 10 Hind wing with the cell short, veins 3, 4, 5 from the angle, 6, 7 from upper angle

SECT I (Emlita) Fore wing of male with no fovea in end ot cell

4712 Bradina admixtalis, Will Cat xvin, p 665, Moore, Lep Ceyl. in, pl 180, fig 13, C & S no 4110 Botys panæusalis, Will Cat xix, p 998 Pleonectusa tabidalis, Led Wien ent Mon 1863, pp 426, 481 Pleonectusa sodalis, Led Wien ent Mon 1863, pp 426, 481 Pleonectusa pallidalis, Wair A M N H (6) xvii, p 147

Fore wing with dark Pale ochreous brown, palpi white below speck in cell and discocellular lunule, hind wing with discocellular speck, both wings with curved postmedial brown line, a marginal line and line at base of cilia, which on fore wing are fuscous with grey tips, on hind wing whitish

Hab Natal, Japan, throughout India, Ceylon, and Burma. Perak Exp 24 millim

- 4713 Bradina adhæsalis, Will Cat xviii, p 664, Moore, Lep Ceyl. in, pl 180, fig 14, C & S no 4109 (part)
- Differs from admirtalis in being black-brown, the cilia blackish, with a fine pale line at base.

Hab Nilgiris, Ceylon Exp 24 millim

4714 Bradina subpurpurescens, Warr A M N. H (6) xvii, p 147.

d Fuscous, with a cupreous yellow gloss, abdomen whitish Fore wing with faint discocellular speck and straight postmedial line from costa to vein 2 Underside with the inner area of fore wing and the basal half of costa of hind wing whitish

Hab. Bhután, Khásis Exp 30 millim

4715 Bradina melanoperas, n sp

d Head, thorax, and abdomen fuscous brown, the anal tuft pure white, wings greyish brown, irrorated with brown scales. Fore wing with black discocellular lunule and indistinct curved minutely waved postmedial line, with the area beyond it rather darker. Hind wing with traces of curved postmedial line Underside paler, the apical area of fore wing black

Hab E Pegu (Doherty) Enp 34 millim Type in coll. Elwes.

4716 Bradina bicoloralis, n sp

d. Differs from admixtalis in being browner, fore wing with the postmedial line somewhat sinuous, hind wing with it rather more sinuous. Underside of fore wing smoky black, the costa and apical area brown; hind wing white, the outer area suffused with fuscous except at apex and anal angle

Hab E Pegu (Doherty) Eap 30 millim. Type in coll Elwes

4717. Bradina translinealis, n. sp.



Fig 133 -Bradina translinealis, c. }

Differs from admixtalis in being fuscous brown Fore wing with the postmedial line almost straight and reaching the inner margin near outer angle, hind wing with the postmedial line slightly sinuous and not curved, the cilia dark with slight grey tips

Hab NW Himalayas. Eap. 30 millim Type in B M

4718. Bradina sagittalis, Swinh A M N H (6) xvi, p 301.

Fuscous brown; antennæ ringed with fuscous; wings irrorated with black. Fore wing with diffused outwardly oblique black antemedial line, a black speck in cell and incomplete discocellular lunule, a postmedial diffused black line sending a very acute angle inwards on vein 5, then highly excurved and retracted at vein 2 to below angle of cell. Hind wing with diffused postmedial line retracted at vein 2 to angle of cell.

Hab Acera, W. Africa, Hyderabad, Sind, Ceylon. Exp. 20 millim.

SECT. II. (Physematia) Fore wing of male with a slight foven in upper angle of cell.

*4719 Bradina concordalis, Led Wien ent. Mon 1863, p. 447, pl 1 fig 27, and pl xvii, fig 14, C. & S no 4292.

Head and thorax brown; abdomen yellow. Fore wing brown; yellow patch in end of cell, a large patch beyond the cell, with spot below it and small spot on costs above it; a submarginal band from costs to vein 2, angled inwards on vein 5. Hind wing brown; the basal area yellow; a yellow patch beyond cell, with a spot below it, a submarginal waved band between veins 6 and 2; underside yellow, with medial and postmedial brown bands, the former not reaching the costs or inner margin; the outer area brown.

Hab. Nicobars Exp. 16 millim.

Genus LUMA.

Luma, Wll. Cat xxvii, p 121 (1863) Pelena, Moore, Lep Ceyl 111, p 386 (1886) Loxocorys, Meyr Trans Ent Soc 1894, p 6

Type, L anticalis, Wlk, from Borneo

Range Japan, Khásis; Ceylon, Burma, Borneo

Palpi upturned, the 2nd joint reaching above vertex of head and slightly scaled in front, the 3rd well developed and acuminate; maxillary palpi filiform, frons oblique; vertex of head with rough hair, antennæ of male thickened and flattened, tibiæ with the outer spurs about half the length of inner. Fore wing broad; the apex rounded, veins 3, 4, 5 well separated at origin; 7 remote from 8, 9, 10. Hind wing with the cell about half the length of wing, veins 3, 4, 5 from near angle, 6, 7 from upper angle

The typical species in male has a small tooth at middle of costa which is thickened below, the base of veins 8, 9, 10 swollen and

11 almost obsolete

4720. Luma flavalis, Hmpsn Ill Het 1x, p 171, pl 173, fig 14

Q. Pale orange-yellow, palpi and extremity of abdomen tinged with fuscous. Fore wing with the basal area fulvous except towards costa, followed by a yellow band with a whitish patch on it below median nervure, a large fuscous patch on outer half of wing extending from end of cell and inner margin to near outer margin at middle, then to the subcostals, its edge below the costa sinuous. Hind wing whitish, with faint curved postmedial diffused fuscous shade.

Hab Ceylon Exp 32 millim.

4721. Luma unicolor, Moore, Lep Ceyl III, p 386, pl 184, fig 16;
C & S no 4705
Lygropia uniformis, Hmpsn 111 Het 1x, p 171, pl 173, fig 7

2. Uniform fulvous yellow, without the slightest trace of markings or shade of any other colour

Hab Ceylon. Exp 30 millim.

4722. Luma sericea, Butl A M N H (5) 1v, p 451

Fuscous brown; palpi white at base; from grey. Fore wing



Fig 134.—Luma sericea, o

with indistinct curved sinuous antemedial line, the medial part of costa ochreous, a dark discocellular lunule with ochreous spot on its outer edge, an indistinct postmedial line, excurved between veins 6 and 3, slightly outlined with ochreous, and with large

ochreous spot beyond it on costa, cilia ochreous except between

reins 2 and 4. Hind wing with industrict cell-speck and slightly sinuous postmedial line, underside suffused with grey

Hab. Japan, Khásis, Shan States. Exp 22-26 millim.

4723 Luma obscuralis, Swinh A M N H (6) xvi, p 300

Fuscous brown, head brownsh ochreous, palpi black at sides, fore legs ochreous marked with fuscous, anal tuft ochreous. Fore wing with obscure postmedial line arising from a blackish spot on costa and very much excurved between veins 8 and 2. Hind wing somewhat paler in parts; an obscure diffused postmedial line excurved between veins 6 and 2. Underside paler, with discocellular lunule, the postmedial line reduced to specks

Hab. Khásis. Exp. 22 millim.

Genus ORPHNOPHANES.

Orphnophanes, Led. Wien ent Mon 1863, p 428 Syntomodora, Meyr Trans. Ent. Soc 1894, p 487.

Type, O eucerasalis, Wlk

Range Sikhim, Assam; Andamans; Borneo, Amboina.

Differs from Luma in the 2nd joint of palpi being shorter, hardly reaching vertex of head, and broadly rounded with scales in front; the frons rounded, antennæ ciliated.

- SECT I Fore wing with the apex not produced, hind wing with the outer margin nearly straight.
- A. (Syntomodora). Hind wing with the inner margin normal.
- 4724. Orphnophanes thoasalis, Wik Cat. xviii, p 692, C. & S no. 4078.
- d. Differs from Luma sericea in the palpi being banded black and white Fore wing with the antemedial line straighter and more prominent, the discocellular mark quadrate, white, and with a black line on inner and outer sides, the postmedial line with whitish patch beyond it on costa, retracted on vein 2 to below angle of cell, then waved. Hind wing with discocellular speck, the postmedial line sinuous and retracted on vein 2 to below angle of cell.

Hab. Sikhim, Andamans; Borneo Exp 20 millim.

4725. Orphnophanes lævalis, Wair. A M N H (6) xvii, p 206.

of Fuscous brown, head and extremity of abdomen with a fulvous tinge. Fore wing with indistinct antemedial black line, two discocellular black specks; an almost straight prominent black postmedial line with another ill-defined line beyond it. Hind wing with waved black medial and postmedial lines, the latter joined at vein 2 by a line from near apex, diffused towards costa, and ending at anal angle, both wings with fine marginal line and line through the cilia.

Hab. Khásis Evp 14 millim

- B (Orphnophanes). Hind wing of male with the inner margin slightly lobed and fringed with hair.
- 4726. Orphnophanes encerasalis, Wlk Cat xix, p 1002 Orphnophanes productalis, Led Wien ent Mon 1863, p 428, pl 16, fig 7.
- d Head and thorax fuscous, the latter with some white at end of patagia and on metathorax, abdomen white Fore wing fuscous with a cupreous tinge, the costa white from near base to near



Fig 135 Orphnophanes eucerasalis, of §

apex, the inner margin from near base to outer angle; an indistinct dark speck in end of cell; the indistinct postmedial line arising from a black spot on costa, nearly straight to vein 5, excurved to vein 2, then retracted to below angle of cell Hind wing pure white, with postmedial black speck below costa and larger spot on

vein 2, with traces of a line from it to anal angle; underside with discocellular black speck and traces of irregular postmedial series bent outwards between veins 5 and 2

Hab Sikhim, Borneo, Amboina Exp 22 mm

SECT II. Fore wing with the apex produced; hind wing with the outer margin rounded

4727. Orphnophanes albisignalis, a sp

3. Fulvous Fore wing with very prominent oblique silverywhite dark-edged discocellular band; traces of a postmedial line highly excurved between veins 6 and 3, the cilia black at base, pure white at tips. Hind wing pale ochreous, with traces of a postmedial line excurved between veins 6 and 3; the marginal area suffused with fulvous, cilia white. Underside with the postmedial line of hind wing dark and more prominent

Hab Sikhim (Dudgeon), Nágas (Doherty) Exp 20 millim.

Type in coll Elwes.

4728 Orphnophanes inconsequens, Warr A M N H (6) xvn, p 204

d Pale fulvous; palpi ringed with black Fore wing with black annulus at base of costa followed by a prominent black spot, irregularly waved antemedial and postmedial dark lines, a discocellular black line on a white spot, the costal area variegated with white towards base and with two black specks on white spots beyond middle, a submarginal series of black spots placed on a white ground towards costa, cilia variegated with black. Hind wing clothed with rough bair and with traces of antemedial, postmedial, and submarginal black lines prominent below.

Hab. Khásis Eip. 16 millim.

Genus COPTOBASIS

Coptobasis, Led Wien ent Mon 1863, p 429

Type, C sulcalis, Wik Range N E India, Borneo

Palpi upturned, the 2nd joint moderately scaled in front, the 3rd short, with a small triangular tuft in front; maxillary palpi minute and filiform, frons rounded, antennæ of male with large tuft of hair from upperside of basal joint, the base of shaft excised, tibiæ with the outer spurs half the length of inner; abdomen long and slender. Fore wing long and narrow, veins 3, 4, 5 from angle of cell, 7 curved and approximated to 8, 9, 10. Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle

4729. Coptobasis sulcialis, Wik Cat. xviii, p 684

J. Glossy black-brown, pectus white, legs pale, the tarsi whitish,



Fig 136 - Coptobasis sulcialis, o

Hab. Khásis, Nágas, Borneo.

abdomen white below. Fore wing with indistinct oblique antemedial line; spots in cell and on discocellulars; the postmedial line slightly curved from costa to vein 3, then bent inwards to below end of cell. Hind wing with traces of discocellular spot and sinuous postmedial line.

Exp. 38 millim

Genus CŒLORHYNCIDIA, nov.

Type, C ovulahs, Hmpsn. Range N.W Himalayas

Palpi obliquely upturned and not reaching vertex of head, the 2nd and 3rd joints conically scaled; maxillary palpi filiform; from produced to two slight lateral angles; antennæ of male thickened and annulated with rings at the joints, tibiæ with the outer spurs half the length of inner, veins 3, 4, 5 from close to angle of cell, 7 well separated from 8, 9, 10. Hind wing with the cell short, vein 3 absent, 4, 5 well separated; 6, 7 from upper angle.

4730. Cælorhyncidia ovulalis, n sp



Fig 137 — Calorhyncidia ovulalis, 5

d. Fuscous black; frons, vertex of head, antennæ, pectus, and legs ochreous, abdomen ventrally ochreous ringed with black, the anal tuft fulvous. Fore wing with curved dark antemedial line, a whitish postmedial oval

patch diffused upwards to costs and extending down to vem 5, the

postmedial line excurved round it, then incurved. Hind wing with obscure curved postmedial line

Hab Simla (Harford); Dharmsála (Hocking). Erp 28 millim.

Type in B M.

Genus DIATHRAUSTODES, nov

Type, D leucotrigona, Hmpsn.

Range. Nilgiris.

Palpi upturned and reaching vertex of head, the 3rd joint short and naked, maxillary palpi filiform; from rounded, antennæ annulate, tibiæ with the spurs nearly equal. Fore wing with vein 3 from before angle of cell, 7 straight and well separated from 8, 9, 10 Hind wing with the cell short; vein 3 from angle, 4, 5 on a long stalk, 6, 7 from upper angle; 7 anastomosing with 8 to two-thirds of wing

4731. Diathraustodes leucotrigona, n sp.



Fig 138 Diathraustodes leucotrigona, d of Fuscous, suffused with grey; palpi white at extremity. Fore wing with a triangular white patch on costa beyond middle reaching to vein 6; both wings with the cilia white

Hab. Nilgiris (Hampson) Evp 16 millim. Type in B M

Genus DIATHRAUSTA.

Diathrausta, Led Wien ent Mon 1863, p 438

Type, D profundalis, Led

Range W Indies, Biazil, India, Ceylon, Amboina; Sumbawa Palpi porrect, triangularly scaled, the 3rd joint hidden by hair, maxillary palpi dilated with scales, from rounded, antennæ annulated and ciliated, tibiæ with the outer spurs two-thirds length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, 10 Hind wing with the cell about half the length of wing, vein 4 absent, 6, 7 from upper angle.

4732 Diathrausta profundalis, Led Wien ent Mon 1863, p 438,



Fig 139
Diathrausta profundalis, &

Diathrausta conicalis, Warr A M.
N H (6) xvii, p 143
Diathrausta obliterata, Wari A M
N H (6) xvii, p 143

Fuscous black; palpi white below, abdomen ringed with white. Fore wing with traces of curved antemedial line; a postmedial triangular white patch

extending down to vein 5, and with traces of a sinuous line from

it to inner margin. Hind wing with sinuous white postmedial

line, cilia of both wings chequered black and white.

The forms conscales and obliterata have the white marks on the cula much reduced, the former has the triangular white patch small, the latter reduced to a spot

Hab. Sikhim, Nilgiris, Sumbawa, Amboina Exp. 18 millim.

4733 Diathrausta picata, Bull Ill. Het vii, p 94, pl 184, fig 17.

Differs from profundalis in the fore wing having a white spot in end of cell, the postmedial white patch on costs with its edges sinuous and outlined with white Hind wing with white spot in cell, a dark discocellular lunule, a large subquadrate white patch beyond the cell, with the postmedial white line bent outwards beyond it

Hab Dharmsála Exp 18 millim

Genus STENIA.

Stema, Guen Dup Cat Meth p 201 (1844) Arma, Guen Delt & Pyr p 240 (1854) Amamophanes, Led Wien ent Mon 1869, p 422 Symmolecma, Meys. Trans Ent Soc 1894, p 469

Type, S. punctalis, Schiff

Range Neotropical, Palmarctic, Ethiopian, and Oriental regions. Palpi porrect, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated at extremity, from rounded, antenne as long as fore wing and annulated, legs long and slender, the outer spurs half the length of unner, abdomen long. Fore wing long and narrow; vein 3 from before angle of cell, 4, 5 from angle; 7 straight and well separated from 8, 9, 10 Hind wing narrow, the cell about half the length of wing; vein 3 from before angle, 4, 5 approximated for a short distance, 6, 7 from upper angle

4734 Stenia punctalis, Schiff Wien Verz p 123
Asopia stassalis, Dup Lep Fr viii, p 199, pl 223, fig 4 Margaritia longipedalis, Curt Brit Ent vi, pl. 312

Fuscous brown, usually with a rufous tinge, palpi white below, abdomen ranged with white Fore wing with obliquely sinuous antemedial dark line, a white discocellular lunule, a postmedial line bent outwards between veins 5 and 2, then retracted to below end of cell Hind wing with obscure sinuous postmedial line Hab Europe, Armenia, Dharmadla Evp 22 millim

4735 Stenia spodinopa, Meyr Trans Ent Soc 1894, p 469 Stema profanalis, Hmpsn Ill Het 1x, pl 174, fig 22 (nec Wik).

Fore wing with obscure antemedial line, a Black-brown pale speck on vein 2 below middle of cell, a pale discocellular Junule, a minutely dentate pale-edged postmedial line bent outwards between veins 5 and 2 Hind wing with traces of postmedial line excurved between veins 5 and 2 Both wings with a series of pale and dark specks on the margin



Fig 140 -Steniu spodinopa, 3

Hab Ceylon, Baram, Borneo, Sumbawa Exp 20 millim.

4736 Stema pædiusalis, Wll. Cat xviii, p 788

Head, thorax, and abdomen pale brownish fuscous, palpi white below Fore wing fulvous yellow; the costal area brownish fuscous, with the costa pure white, an elongate grey spot in base of cell, a round spot at middle, and larger round spot on discocellulars, an oblique minutely waved postmedial line bent outwards between veins 5 and 2, a marginal grey band with waved inner edge, cilia with a white line at base. Hind wing yellowish white, with slight marginal dark line

Hab. Central Africa, Aden, Bhután. Exp 22 millim.

Genus HYALOPLAGA.

Hyaloplaga, Warr. A M N H (6) 1x, p 432 (1892)

Type, H pulchralis, Moore.

Range Sikhim

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi somewhat dilated at extremity, from rounded: antennæ of male culated, tibiæ with the outer spurs about half the length of inner Fore wing of male with a large fovea below base of median nervure, veins 3, 4, 5 from angle of cell; 7 straight and well separated from 8, 9, 10. Hind wing of male with the costa much lobed near base, veins 3, 4, 5 from angle of cell, 6, 7 from upper angle.

4737 Hyaloplaga pulchralis, Moore, P Z S 1867, p. 90, C & S. no 4430



Head, thorax, and abdomen brown and yellow, palpi white below Fore wing fuscous brown; basal and two subbasal vellow spots below median nervure and a speck in cell, a quadrate yellow spot in end of cell. Fig 141 —Hyaloplaga pulchralis, of } and a large quadrate patch below end of cell with a small spot

beyond it, an oval patch beyond the cell from subcostals to vein 3.

with two spots beyond it below costa; two submarginal specks below spex and some marks near outer angle Hind wing yellow, with discocellular black spot, a postmedial brown line angled outwards at vein 3 and connected with the marginal markings at vein 3 and towards anal angle, an apical and marginal brown band with a series of yellow spots on it, clia of both wings chequered brown and white.

Hab Sikhim. Exp. 24 milhm.

Genus PILETOCERA

Piletocera, Led. Wien ent Mon 1863, p 481 Danaga, Moore, Lep Ceyl in, p 272 (1885)

Type, P violalis, Led, from Amboina

Range. India; Ceylon, Burma, Malayan subregion to Mysol Palpi upturned, the 2nd joint moderately fringed with scales in front and reaching vertex of head, the 3rd obtuse, maxillary palpi extremely minute, from rounded, antennæ of male with long cha, the shaft bent and with a bifid tuft of hair at middle, then serrated, tabiæ with the outer spurs two-thirds length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, 10 Hind wing narrow, the outer margin somewhat excised towards anal angle, the inner margin short, the cell short, veins 3, 4, 5 from the angle; 6, 7 from upper angle

Shor I Fore tars: of male fringed with curled hair

4738. Piletocera ægimiusalis, Wil. Cat xix, p 920 Desmia collaris, Wil. Cat xxxiv, p 1293 Ædiodes mysolalis, Wil. Cat xxxiv, p 1299 Danaga pullatalis, Swinh P Z S 1889, p 420

Fuscous black, the base of palpi, frons, collar, and base of



Fig 142 -Piletocera agiminsalis, 6

abdomen whitish Fore wing with whitish spot at middle of cell and quadrate spot in end of it, a small triangular spot on costa before apex; the cilia white at outer angle Hind wing with postmedial white spot on inner margin, the cilia white below middle

Hab. Sikhim; Khásis, Margharita, Assam, Andamans, Borneo; Mysol. Earp. 22 millim

SECT. II Fore tars: naked

4739. Piletocera octosemalis, n. sp

d. Head, thorax, and basal half of abdomen fuscous variegated with ochreous, the terminal half of abdomen yellowish white.

Fore wing fuscous, some ochreous on basal area defining obscure subbasal and antemedial lines; the medial costal area pale ochreous, a dark annulus in cell, another on discocellulars with one on costa above it, the two forming a figure of eight, two small annuli on costa before apex; traces of a postmedial line defined by ochreous and bent inwards at vein 3 to below end of cell, then more strongly defined by ochreous; the apex tinged with ochreous, an ochreous marginal patch towards anal angle. Hind wing with the basal, costal, and apical areas fuscous, the rest of wing yellowish white.

Hab Bernardmyo, Burma (Doherty) Exp 24 millim. Type in coll. Elwes

4740. Piletocera concisalis, WTh Cat xvii, p 345, Moore, Lep-Ceyl iii, pl 179, fig 3, C & S no 4260

Fuscous black, palpi white below, abdomen variegated with pale scales. Fore wing with sinuous white-edged antemedial line; a quadrate white spot in end of cell conjoined to an ochreous-white costal streak, a pale speck at lower angle of cell; the postmedial line sinuous, with a pale outer edge, arising from a pale spot on costa, nearly straight to vein 2, then retracted to below angle of cell, the chia pale at outer angle. Hind wing with oblique medial white line angled beyond lower end of cell and terminating at anal angle, the chia pale below middle.

Hab. Nilgiris, Ceylon. Exp. 20 millim.

4741. Piletocera costipunctata, Warr A M N H (6) xvin, p 217 Desmia illectalis, Wik Cat xix, p 931 (præocc)

Black-brown, palpi white below; abdomen slightly marked with ochreous. Fore wing with black and ochreous strigæ on costa; an indistinct waved antemedial dark line slightly defined by ochreous, a whitish quadrate spot in end of cell and discocellular black lunule with line from it to inner margin; a curved postmedial line ending at outer angle and slightly defined by ochreous. Hind wing with ante- and postmedial dark lines, the latter ending at anal angle; both wings with pale patches on cilia at anal angles and a pale line through their bases.

Hab Tenasserim, Borneo Exp 16 millim.

4742. Piletocera albilunata, Warr A M N H (6) xvii, p 143.

Q. Black-brown, palpi white below, abdomen slightly ringed with white. Fore wing with traces of a basal yellow patch and antemedial line arising from an orange spot on the costa, a prominent orange medial spot on costa conjoined to the pure white discocellular lunule; a slightly sinuous orange postmedial line; a white patch on cilia at outer angle. Hind wing with pure white discocellular lunule; indistinct sinuous yellow medial line; cilia white at apex and anal angle

Hab. Khásis. Evp. 16 millim.

4743 Piletocera flexiguttalis, Warr A.M N H (6) xvii, p 144

d. Dark brown; palpr yellowish at base, abdomen yellowish at extremity. Fore wing with a fulvous spot in cell, a wedge-shaped yellow discocellular band with a spot on the costa beyond it, cha yellow at outer angle and towards anal angle of hind wing

I with the discocellular band of fore wing developed into a

triangular patch reaching the costa.

Hab. Khásis Eap. 24 millim.

4744. Piletocera contingens, Moore, Lep Ceyl. m, p 273, pl. 179, fig 8, C. & S no 4356

Bright yellow, palpi whitish below, fore legs and thorax marked with black; antennal tuft black, abdomen ringed with black. Fore wing with two spots on costa and two on inner margin on basal area, a medial figure-of-8 shaped mark, the lower part often filled in with black, connected by a line with inner margin and by a streak on median nervure with the large discocellular annulus. Hind wing with antemedial nearly straight line; both wings with postmedial line excurved between veins 5 and 2; a triangular black patch on outer margin below apex and others at outer and anal angles.

Hab. Sikhim, Margharita, Assam, Ceylon, Shan States,

Borneo Exp. 16 milim.

4745. Piletocera elongalis, Warr A M N H. (6) xvii, p 145

d. Head, thorax, and abdomen ochreous marked with fuscous. Fore wing long and narrow; ochreous, with fuscous suffusion on inner area from base to near outer angle and extending over the disk almost to apex, a slightly sinuous antemedial line; a black annulus in cell and discocellular lunule filled in with ochreous, a black spot above it on costa and two other specks nearer apex, a sinuous submarginal line. Hind wing fuscous, with traces of antemedial black line terminating in an ochreous spot on inner margin, the margin ochreous, expanding into a patch below middle.

Hab. Khásis Exp. 18 millim.

Genus CAMPTOMASTYX, nov.

Type, C. hisbonalis, Wlk

Range. China, N.W Himalayas; Sikhim; Assam, Borneo Palpi porrect, long and straight, the 2nd joint about twice the length of head and fringed with hair below at extremity, the 3rd long, maxillary palpi extremely minute, from rounded, antennes of male chiated, thickened, bent downwards, and clothed above with rough hairs; tibis with the outer spurs about two-thirds length of inner, abdomen of male dilated at extremity, the

claspers covered with a large tuft of hair Fore wing with veins 3, 4, 5 well separated at origin, 7 straight and well separated from 8, 9, 10. Hind wing narrow, the cell short; veins 3, 4, 5 radiating from the angle, 6, 7 stalked

SECT I Antennæ of male with the thickening at about one-third from base

4746. Camptomastyx hisbonalis, Wik Cat xviii, p 707
Botys pacalis, Leech, Entom 1889, p 69, pl 4, fig 15
Diplotyla longipalpis, Butl Ill Het vii, p 95, pl 135, fig 14.

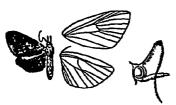


Fig 143
Camptomastyx hisbonalis, 3. 1

6. Dark rufous suffused with fuscous, male with the anal tuft ochreous. Fore wing with obscure nearly straight antemedial line, the discal area more rufous; a minutely dentate postmedial line slightly bent outwards between veins 5 and 2, along which it is retracted to below angle of cell Hind wing darker

Hab. China, Simla; Dharmsála, Khásis, Nágas, Borneo. Exp. 22 millim

SECT II. Antennæ of male with the thickening and bend at two-thirds from base and short.

4747. Camptomastyx exuvialis, Snell Trans. Ent Soc 1890, p 627

3 Dark brown Fore wing with traces of medial yellowish spot from costa to median nervure, and of a postmedial spot from costa to vein 6

Hab Sikhim; Khásis. Exp. 26 millim

Genus HYDRORYBINA, nov.

Type, H. polusalis, Wlk

Range Japan, Sikhim, Assam; Calcutta; Ceylon, Borneo Palpi porrect, extending about three times the length of head and downcurved at extremity; maxillary palpi about half the length of labial and acute; frons flat and oblique. antennæ of female ciliated, tibiæ with the outer spurs about two-thirds length of inner. Fore wing long and narrow, vein 3 from before angle of cell, 4, 5 from angle; 7 straight and well separated from 8, 9, 10 Hind wing with the cell short; vein 3 from angle; 4, 5 approximated for a short distance, 6, 7 from upper angle.

4748 Hydrorybina polusalis, Wik Cat. xvin, p. 703

2. Fiery rufous. Fore wing with the costa dark; a dark

antemedial line, angled on median nervire, a discocellular lunule.

the postmedial line excurved from costs to vein 2. Hind wing with the costal and inner areas pale, a curved dark



postmedial kne, obsolete on inner area Both wings with marginal dark line and the cilia fuscous except towards anal angle of hind wing.

Hab. Sikhim, Borneo. Exp. 20 millim.

4749 Hydrorybina bicolor, Moore, Lep Atk p 207, C & S. no. 4350 Pionea rubralis, Warr A M N. H (6) xvii, p 97

- Q. Head, thorax, and fore wing crimson with a purple tange, calla purple, ochreous at taps, abdomen and hind wing pale fuscous brown.
- d browner, fore wing irrorated with black, a black speck at lower angle of cell a postmedial line highly excurved below costs, then oblique

Hab Khásis, Calcutta; Ceylon Ecp, & 14, Q 16-22 millim

Genus MABRA.

Mabra, Moore, Lep Ceyl 111, p 280 (1885).

Type, M eryxalis, Wlk.

Range. India, Ceylon, and Burma

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform, frons rounded, tibus with the spurs long and nearly equal. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, 10 Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle, 7 anastomosing strongly with 8.

SECT I. Antennæ of male with long cilia

4750 Mabra eryxalis, WV. Cat xvii, p 871, Moore, Lep Ceyl 11, pl 179, fig 4, C. & S no 4254.

Bright orange. Fore wing with industriet sinuous antemedial



Fig 145 -Mabra eryxalis, of

orange line, the whole discal area suffused with fuscous, extending down to inner margin, a black discocellular lunde, a sinuous dark postmedial line outwardly oblique to vein 3, then recurved to the angle of cell and excurved again, an indistinct waved orange submarginal line

Hind wing suffused with fuscous, the marginal area orange, a waved orange submarginal line.

ł.

Hab. Punjab, Ceylon; Nágas, Rangoon Exp. 16 millim.

SECT II. Antennæ of male with the shaft annulate and longer.

4751. Mabra nigriscripta, Swinh A M N H (6) xvi, p 302

Bright orange, palpi fuscous Fore wing with obliquely curved rufous antemedial line, a black annulus on middle of costa; a rufous discocellular line surrounded by a large annulus conjoined to another annulus below lower angle of cell, a postmedial rufous line black at costa, nearly straight to vein 2, then slightly retracted. Hind wing with slightly irregular subbasal ante- and postmedial lines, the last slightly retracted at vein 2, both wings with the marginal area darker, a black marginal line and the cilia white

Hab Khásis Exp 16 millim

Subfamily SCOPARIINÆ

Proboscis present, maxillary palpi well developed and dilated with scales at extremity Fore wing with more or less developed tufts of raised scales in cell; vein 7 from angle, 10 free Hind wing with the median nervure non-pectinate *, vein 7 anastomosing with 8

The larvæ feed on mosses and lichens, and the imagos rest on rocks and trees except in a few ancestral forms in New Zealand, which are grass-feeders

Key to the Genera

A Palpi upturned 1 Michaglossa, p 241 B Palpi porrect, triangularly scaled, the 3rd

joint hidden by hair

a Hind wing with vein 5 from lower angle of cell or stalked with 4

2 Scoparia, p 242 b Hind wing with vein 5 from above angle of cell 3 Dasyscopa, p 245

Genus MICRAGLOSSA.

Micraglossa, Warr A M N H (6) viii, p 65 (1891)

Type, M scoparialis, Warr Range. Sikhim, Khásis

Palpi upturned, the 2nd joint reaching vertex of head and slightly fringed with hair in front, the 3rd well developed and acuminate, maxillary palpi long and slightly dilated with scales at extremity; from rounded, antennæ somewhat annulate; tibiæ nearly naked, with the spurs almost equal. Fore wing with vein 3 trom before angle of cell; 4, 5 from angle, 7 straight and well separated from 8, 9 Hind wing with vein 3 from near angle of cell; 4, 5 from angle, 6, 7 from upper angle.

^{*} Except in one or two Australasian genera

4752. Micraglossa scoparialis, Warr A N M H (6) viii, p 66.

o. Grey, irrorated with black, with an olive-yellow tinge Fore



Fig 146
Micraglossa scoparialis, of

wing with diffused black basal patch, a diffused black ante-medial band constricted from vein 1 to inner margin, a large somewhat X-shaped discocellular black spot, with fuscous patch between it and costa, fuscous patches on costa before apex and on inner margin before outer

angle Hind wing pale grey.

Hab Sikhim, Khásis Exp 16 millim

Genus SCOPARIA.

Scoparia, Haw Lep Brit p 498 (1811)

Type, S. cembras, Haw., from Europe.

Range Universally distributed.

Palpi porrect, about twice the length of head, the 2nd joint with long projecting hair below, the 3rd naked, maxillary palpi largely dilated with scales; from rounded, antennæ minutely ciliated and somewhat annulated, tibiæ with the outer spurs about two-thirds length of inner. Fore wing with more or less developed tufts of raised scales at middle and end of cell, vein 3 from before angle of cell; 4, 5 from angle; 7 straight, and well separated from 8, 9, to which 10 is approximated towards origin. Hind wing with vein 3 from before angle of cell, 6, 7 shortly stalked.

SECT. I. Hind wing with yoins 4, 5 from angle of cell

4753. Scoparia pulveralis, Snell Trans. Ent Soc 1890, p 570

Head and thorax black-brown, irrorated with bluish-white scales, abdomen fuscous. Fore wing black-brown, irrorated with bluish-white scales, which form an indistinct streak below base of median nervure and broad medial band, a dark quadrate patch in end of cell with blue-grey band beyond it from costa to vein 5, beyond which again are very obscure irregular blue-grey postmedial and submarginal lines; calls whitish, with series of specks and the tips fuscous. Hind wing nearly pure white

Hab. Sikhim Exp 22 millim.

4754. Scoparia medinella, Snell Trans Ent Soc 1890, p 571

Differs from pulverals in the fore wing having an oblique antemedial white line, no medial line, the mark in cell figure-of-8-shaped, the band curving round it and reaching inner margin, the submarginal line developed into blotches below apex

SCOPARIA. 243

and middle Hind wing with the apical area diffused with fuscous.

Hab. Sikhim. Exp. 20 millim

SECT. II. Hind wing with veins 4, 5 shortly stalked

4755 Scoparia olivaris, *Hmpsn Ill Het* viii, p 131, pl. 154, fig. 11

Q. Head golden olive and black · thorax black and grey. Fore wing grey, thickly irrorated with black and more slightly with golden olive; the veins broadly streaked with golden olive, especially beyond the cell; a pale antemedial line prominently angled on median nervure and slightly on vein 1; diffused black patches in and below middle of cell and in end of cell; a postmedial pale line, angled inwards on vein 6, highly excurved to vein 2, retracted to below end of cell, and angled outwards again on vein 1; a dentate white submarginal line Hind wing pale, slightly suffused with fuscous and yellow towards margin; ciha of both wings yellowish, with a fuscous line through them.

Hab. Nilgiri plateau Exp. 20 millim

4756 Scoparia delicatalis, Wik Cat xxxiv, p 1500, C & S no. 4533

Head, thorax, and fore wing grey, thickly irrorated with black and fuscous and more slightly with brown. Fore wing with a black streak below base of median nervire, an ill-defined pale curved antemedial line with diffused black on its outer edge; a black speck at middle of cell, and black spots on rufous patches below middle and on discocellulars, a pale dentate postmedial line excurved between veins 6 and 3, and with diffused fuscous brown beyond it, ill-defined grey submarginal marks and a series of dark specks on margin and cilia. Hind wing pale, the apex and margin very slightly tinged with fuscous.

Hab. Sikhim, Nágas, Nilgiris. Exp 18 millim.

4757. Scoparia rufostigma, Hmpsn III Het viu, p 131, pl 154, fig 4

Differs from delicatalis in the antemedial line of fore wing being prominently white, angled outwards in cell and inwards below it; the medial area black, with diffused grey in, below, and beyond end of cell, the black discocellular spot and rufous patch large and prominent; the patch below cell absent; the postmedial dentate white line bent outwards to near margin between veins 3 and 1; an apical pale patch with black speck on it. Hind wing whiter.

Hab. Nilgiri plateau. Exp. 20 millim.

4758 Scoparia mediorufalis, n sp

Grey, irrorated with black and suffused with yellow. Fore wing with the base rufous, followed by a grey band, the dark oblique antemedial line excurved in and below cell; the whole medial area suffused with rufous; rufous and black spots in and below middle of cell; a large black-edged, irregularly remform, rufous stigma on discocellulars; the postmedial pale line bent outwards at vein 6, then obliquely curved to inner margin, the outer area grey, with dark patches on costa before apex, on outer margin at middle, and on inner margin beyond postmedial line; a marginal series of dark specks. Hind wing pale fuscous.

Hab. Dharmsala (Hocking), Sikhim (Pilcher). Exp 18 millim.

Type in B. M.

4759 Scoparia murificalis, Wile Cat xix, p 826, Hmpsn Ill Het. ix, pl 174, fig 10, C. & S no 4585
Scoparia congestalis, Wile Cat xix, p 826, Hmpsn. Ill Het ix, pl 174, fig 2, C & S no 4582
Scoparia truncicolella, Butl Ill Het vii, p 20 (nec Stainton)

Grey, irrorated with black and suffused with reddish brown.



Fig 147 Scoparia murificalis, &

Fore wing with oblique, slightly sinuous pale antemedial line with black on its outer edge; obscure black spots in and below middle of cell, and a somewhat X-shaped black discoccilular mark; a minutely dentate postmedial pale line defined by black on its inner

side and bent outwards between veins 5 and 2, ill-defined grey patches on marginal area below apex and above outer angle conjoined to the postmedial line, a marginal series of black specks Hind wing whitish or pale fuscous

In N.W. Himalayan and some Ceylon specimens there is no

reddish tinge.

Hab Sımla; Dharmsála, Ceylon Evp. 16-20 millim

4760. Scoparia vinotinctalis, n sp

d. Head, thorax, and fore wing violaceous grey, evenly and thickly irrorated with fuscous. Fore wing with slight black streak below base of median nervure; traces of a diffused oblique ante-medial band and of a discoccillular patch, a dark postmedial line bent outwards at vein 6, then oblique to inner margin, with a diffused dark band beyond it, leaving a grey patch in the bend of the line, a marginal series of black specks. Hind wing pale, with slight fuscous and ochreous tinge, both wings with fuscous line through the cilia.

Hab Nilgun plateau (Hampson) Esp. 20 millim Type in B M

4761. Scoparia canicostalis, n sp

Head grey and brown, thorax brown grizzled with grey; abdomen pale. Fore wing brown, with grey fascise on costa and median nervure, the latter irrorated with dark scales and with a black streak below it, a black discocellular spot; the interspaces

of outer area streaked with grey and black; a marginal series of black specks Hind wing pale, tinged with ochreous and fuscous. Hab Nilgiris (Hampson) Exp. 26 millim. Type in B. M.

Genus DASYSCOPA.

Dasyscopa, Meyr. Trans Ent Soc 1894, p 464

Type, D homogenes, Meyr. Range Assam, Sumbawa.

Differs from Scoparia in the hind wing having vein 5 from well above 4, male with a groove on inner area hairy above and with tufts of hair arising from it below.

4762. Dasyscopa homogenes, Meyr Trans. Ent Soc 1894, p 464. Scoparia planilinealis, Warr A M N H (6) xvii, p 207

Head, thorax, and abdomen grey irrorated with black



Fig 148
Dasyscopa homogenes, 5 }

Fore wing grey irrorated with black; a subbasal black spot, an indistinct antemedial pale line defined by black on outer side, and connected with prominent black spots in and below cell; a group of irregular black spots at end of cell, with a dark mark above them on costa; a pale postmedial line defined by

fuscous, and slightly excurved between veins 6 and 3, and with a series of diffused spots beyond it connected with a diffused marginal series of spots Hind wing pale fuscous.

Hab. Khásis; Sumbawa Eap. 18 millim

Subfamily PYRAUSTINÆ.

Proboscis well developed. Fore wing with vein 1a separate from 1b; 7 not stalked with 8, 9. Hind wing with the median nervure not pectinated on upperside *; 4, 5 from a point or rarely stalked; 7 usually anastomosing with 8.

Key to the Genera

A Palpi upturned.

a Palpi with the 3rd joint long, naked, and acuminate

a Palpi with the 2nd joint porrect, the 3rd upturned, both wings with veins 4, 5 stalked, fore wing with vein 6 absent

b'. Palpi with the 2nd joint upturned, fore wing with vein 6 present

a² Maxillary palpi almost as long as the labial and triangularly scaled 1. ORTHORAPRIS, [p 251.

2 SUFETULA, p 252.

^{*} Except in Macaretæra and a few genera from other regions

b.

δ ² . Maxillary palps much shorter than the labial		
and filiform a Palpi with the 2nd joint not reaching		
vertex of head		
a ⁴ . Antenne with the shaft annulate, hind wing with the outer margin excised		
below apex	3.	Massepha, p 253
b. Antennæ with the shaft smooth, hind		, F
wing with the outer margin evenly curved		
a^5 Frons rounded		•
as Hind wing with veins 3, 4, 5 approxi-	^	T)
mated for a short distance . 5° Hind wing with veins 4, 5 approxi-	y .	REHIMENA, [p 261
mated for a short distance	10,	ZINCKENIA.
c. Hind wing with veins 4, 5 not ap-		p 262
proximated towards origin b Frons flat and oblique, hind wing with	11	Tabidia, p 263
veins 4, 5 not approximated towards		
origin	8	RAVANOA, p 260
b ³ Palpi with the 2nd joint reaching vertex of head		
a. Fore wing with vein 7 straight and well		_
separated from 8, 9	7	[p 256
as. Antenne with the shaft smooth bs Antenne with the shaft annulate	4	PYCNARMON, AULACOPTERA,
b4 Fore wing with vein 7 curved and ap-	_	[p 254.
proximated to 8, 9 for about one-third		L" OEE
length. as. Fore wing with veins 4, 5 from cell .	6	[p. 255, Rhimphaleodes,
b Fore wing with yours 4, 5 stalked .	5	XANTHOMELÆNA,
b. Palpi with the Srd joint short, naked, and obtuse		[p 255
	12	EURRHYPARODES,
a' Maxillary palpi dilated with scales. b' Maxillary palpi filiform.		[p. 263.
a ² Palpı with no tuft of hair at end of 2nd joint		
a3. Palpi with the 2nd joint moderately and		
evenly scaled in front		
a ⁴ Fore wing with vein 7 nearly straight and well separated from 8, 9	41	LYGEOPIA, p 341.
b' Fore wing with vein 7 curved and ap-		
proximated to 8, 9 for about one-third	40	G
length b ³ Palpi with the 2nd joint broadly rounded	ŧU	Sylкрта, р 328.
with scales in front, fore wing with		- 007
 vein 7 curved and approximated to 8,9 % c³ Palpi with the 2nd joint angled with 	38	Botyodrs, p. 320.
scales in front		
a4 Fore wing with vein 7 curved and ap-		
proximated to 8, 9 for about one-third length, the outer margin excised below		ſр 824.
apex	37.	CERATARCHA,
Fore wing with vein 7 straight and well		[p 822.
separated from 8, 9, the outer margin	15.	GONTORHYNGHUS.

62. Palpi with the 2nd joint long and with a tuft of hair at extremity hiding the 3rd joint c. Palpi with a triangular tuft in front of 3rd joint	36.	Deba, p 323.
a' Palpi with the tuft on 3rd joint long, pointed, and extending to the front of the broadly fringed 2nd joint		
a ² . Fore wing with vein 7 curved and approximated to 8, 9 for about one-third length	13	[p. 265. Heterocnephes
b ² . Fore wing with vein 7 straight and not	18	Радура, р 270.
 b'. Palpi with the tuft on 3rd joint short a² Palpi with the 3rd joint short and blunt 	10	I Adiba, p 21 v.
a Palpi with the triangular 3rd joint not set on at an angle		
a Hind wing with vein 7 anastomosing		
with 8 to about three-fourths of wing		
a ⁵ Antennæ with the shaft not annulate a ⁶ Hind wing with voin 3 not approxi-		
mated to 4		[p. 281
a Frons flat and oblique .		Bocchoris,
b' Frons rounded	34	NACOLEIA, p. 312
b ⁵ Hind wing with veins 3, 4 approximated for a short distance, 5 from		
	15	ÆTHOLIX, p. 268
b. Antennæ with the shaft annulate		and the second
a ⁶ Maxillary palpi well developed		
a Antennæ shorter than the fore wing,		
vein 7 straight and not approximated	~ .	~ 070
to 8, 9	21	Syngamia, p 279.
b ⁷ Antennæ longer than the fore wing, vein 7 curved and approximated for		[p 278
some distance to 8, 9	20	RHIMPHALEA,
b ⁶ Maxillary palpi extremely minute		Евста, р 273.
b'. Hind wing with vein 7 anastomosing with		-71
8 almost to apex		
as Fore wing with vein 10 free and closely	10	[p 275.
approximated to 8, 9 5 Fore wing with veins 10, 11 stalked		MARASMIA,
b' Palpi with the triangular 3id joint set on	10	CNAPHALOCEOCIS, [p 275]
at an angle	14	AGROTERA,
6° Palpi with the 3rd joint long and acuminate		[p 266
a° Palpi erect, not recurved		
at Fore wing with vein 7 curved and ap-	20	TT 00=
proximated to 8, 9 for a short distance b Fore wing with vein 7 straight and well	25	ULOPEZA, p 287.
separated from 8, 9	25	CHALCIDOPTEBA,
b3. Palpi recurved over head, in male long and	-0	[p. 291
with a very large tuft of curved hair in		CF. =
tront	24	Nosophora,
d. Palpi with the 2nd and 3rd joints coincally scaled and gradually tangent to appropriate		[p. 288
scaled and gradually tapering to apex a. Hind wing with veins 4, 5 from cell		
a" Maxillary ralpi filiform		
a. From no prominent		

a. Fore wing with vein 7 curved and ap-		
proximated to 8, 9 for about one-third		
length.		
as. Hind wing with years 4, 5 not ap-		[թ. 300,
proximated towards origin	31	
b ⁶ Hind wing with veins 4, 5 approxi-		<u> </u>
mated for a short distance	30	NEVRINA, p 200.
b' Fore wing with your 7 nearly straight		, p
and well separated from 8, 9		
 a⁸ Frons rounded, hind wing with veins 4, 5 not or hardly approximated 		
towards origin		
a ⁷ Hind tibus with the medial spurs		
absent in &, the inner medial spur	90	0
minute in 2	öz,	OLIGOGENTEIS,
67. Hind tibise with the inner medial		[р 804.
spur well developed .	33	DICHOCROCIS,
6 Frons flat and oblique, hind-wing with		[p. 305.
veins 4, 5 approximated for a short		
distance	29	Tyspanodes,
b. From with a rounded prominence, an-		[p 298.
tennæ about one and a half times length		
of fore wing	28,	Гиорив, р. 206.
63. Maxillary palpi dilated with scales		
at Hind wing with veins 4, 5 approximated		
for a short distance	26	CAPRINIA, p. 294.
64. Hind wing with veins 4, 5 not approxi-		
mated, palps of male with the 3rd joint		
long, hollowed out and containing a tust		
of hair	SQ.	PROBODES, p. 328.
b'. Hind wing with veins 4, 5 stalked, 4 almost	000	7 220200220) pi 020.
obsolete in male	97	Macaretæra,
	216	[p 295.
Palps with the 3rd joint porrect		Th year
a'. Palpi with the 2nd joint broadly fringed		
with hair in front, the 3rd lying on it.		
a. Maxillary palpi strongly dilated with		
scales.		
a. Fore wing with vein 7 curved and ap-		
proximated to 8, 9 for some distance		
a Hind wing with veins 4, 5 not approxi-	40	C
	43	GLYPHODES,
6. Hind wing with veins 4, 5 approximated		[p. 345.
for a short distance, fore wing long		
and narrow	42	AGATHODES
b* Fore wing with vein 7 nearly straight and		[p. 844.
well separated from 8, 9, the wing long		_
and narrow	46	EUCLASTA,
b2. Maxillary palpi filiform		[p 368.
a. Fore wing with your 7 curved and ap-		
proximated to 8, 9 for some distance		
a. Hind wing with veins 4, 5 not approxi-		[p 381.
mated towards origin	44	PYGOSPILA
b. Hind wing with veins 4, 5 approximated		[p 864.
for a short distance	47	POLYTHLIPTA,
5. Fore wing with vein 7 nearly straight		[p. 867.
and well separated from 8, 9	48.	LEPYRODES,

 b' Palpi with the 2nd joint moderately scaled in front, the 3rd projecting free a². Frons rounded and not prominent 45 Heortia, p 363 b². Frons with a rounded prominence
a ³ Palpi with the 3rd joint minute; hind wing with veins 4, 5 approximated for a short distance b ³ . Palpi with the 3rd joint long, hind wing with veins 4, 5 well separated at origin 50 Leucinopes,
f Palpi obliquely upturned, with tuits of hair at end of 1st and 2nd joints, the 3rd well developed and obtuse a' Maxillary palpi filiform, hind wing with
veins 4,5 not approximated towards origin 52. Hellula, p 373 b' Maxillary palpi dilated with scales, hind wing with veins 3, 4,5 approximated for a short distance 51 Crocidolomia,
B Palpi porrect [p 37] a Palpi with the 3rd joint naked a' Frons with a large flat corneous plate excised
in front
wing with vein 5 from lower angle of cell. 89. Noctuella, b ² . Fore wing with veins 8, 9 from cell, hind wing with vein 5 from middle of disco- cellulars 91. Singularing
c' Frons rounded or flat and not prominent. [p. 446 a ² Palpi straight and not downcurved at ex- tremity.
a' Fore and hind wings with veins 4, 5 from cell. a'. Palpi with the 2nd joint fringed with hair below towards extremity. [p 446]
as Maxillary palpi triangularly scaled 90 Heliothela, bs. Maxillary palpi slightly dilated with palpi scales 57 Archernis, cs. Maxillary palpi long and filiform 59 Omphisa, p 382
6 Alaxillary paipi long and filtform 59 OMPHISA, p 382 6 Palpi with the 2nd joint fringed above and below with hair 6 Fore wing with vein 7 straight and well
separated from 8, 9 56 THILIPTOCERAS, 55. Fore wing with vein 7 curved and approximated to 8, 9 for some distance. [p 377.
antennæ of male unipectinate for one- third length 55 MEROCTENA, b. Fore and hind wings with veins 4, 5 stalked 58 EUROCENA,
stalked
maxillary palpi with a pointed tuft at extremity
o's Fore wing subtriangular, hind wing with p 414. veins 8, 4, 5 not approximated 78 Protrigonia,

63. Fore wing broad, the costa lobed near base,		
hind wing with veins 3, 4, 5 approxi-		
mated for a short distance	77	AGASTYA, p 413.
b2 Palpi projecting about twice the length of	• •	-mormat-rid K arrow
head		
a. Hind wing with veins 4, 5 not approxi-		~
	54,	CALAMOCHROUS,
b. Hind wing with veins 4, 5 approximated		[p 419.
for a short distance		
at Maxillary palps with a pointed tuft at		
extremity .	79.	Noorda, p 414
6 Maxillary palpi dilated with scales	•	,
a ⁵ Frons with a conical prominence .	23	BOTARCHA,
5 From flat or rounded and not prominent		[p 418.
The trace and less short and mode		(h ±ro•
as Abdomen and legs short and mode-	on	35 n. 417
rately stout	02	MECYNA, p. 417.
b ⁶ Abdomen and legs long and slender	70.	LEPIDONEURA,
b' Palpi triangularly scaled.		[p 411.
a ² Frons rounded or flat and not prominent		
a Antennæ from one to one and a half times		
length of fore wing		
a Antennæ with the shaft annulated, fore		
wing with veins 4, 5 closely approxi-		
wing with Agine at a crosery abbrown	ΩQ	Maruca, p 393
	w.	HIVEOUN' I OOO
b4 Antennæ with the shaft not annulated,		
fore wing with veins 4, 5 not approxi-	~~	m 60°
mated towards origin	60.	Tetridia, p 395.
63. Antennæ more than one and a half times		_
length of fore wing	64	Adrloides,
c3 Antennæ shorter than the fore wing		[p. 894.
at Maxillary palpi with a pointed tuft of		
hair in front		
a ⁵ Fore wing with vein 7 curved and ap-	ΩΛ	DAUSARA, p 415
proximated to 8, 9	500	DAUGALA, P 120
b' Fore wing with vein 7 straight and	01	Hemiscopis,
well separated from 8, 9	OT	TIENTE CONTR.
64 Maxillary palpi strongly dilated with		[p 416.
scales at extremity		
as Antennæ with the shaft not annulate,		
hind wing with the outer margin not		
excised below snex		
as. Legs of moderate length .	86	Pionea, p 422
be Legs very long and slender, fore fe-		-
mora and tabes fringed in male with		
	78	Antigastra,
long hair	,,	[p. 412,
6 Antennæ with the shaft annulate, hind		Th
wing with the outer margin excised	m 4	The same a 410
below apex	74	Diasemia, p 410
c Maxillary palpi filiform or hardly dilated		
with scales at extremity		
as. Hind wing with veins 3, 4, 5 approxi-		_
mated for a short distance	67.	PARBATTIA,
b' Hind wing with veins 4, 5 approximated		[p. 399
for a short distance, 8 separate		
of Hind wing with your 7 not engate-		
a. Hind wing with vein 7 not anasto- mosing with 8, fore wing long and		

Z	5. Hind wing with vein 7 anastomosing with 8				
	 a⁷ Fore wing long and narrow, vein 3 from well before angle of cell b⁷ Fore wing subtriangular, vein 3 from close to angle of cell 	69	Nоморні		401
	 a^s Tibes fringed with hair, build stout b^s Tibes smoothly scaled, build slender. a^s Fore wing with the apex acute, the outer margin angled at vein 	66	Раснуно	LP	396.
	4, hind wing with the outer margin produced at vein 6 and excurved at middle, a large tuft of hair at lower angle of cell b° Both wings with the outer margin	68.	Discorнy	RIS	
C ⁵	evenly curved a ¹⁰ Frons flat and oblique b ¹⁰ Frons rounded Hind wing with veins 4, 5 not approxi-	62 70	CROCIDOP PACHYZAI	HO	387 8.A., 401
i	mated towards origin z ⁵ Antennæ with the shaft annulated with rings at the joints 5 ⁶ Antennæ with the shaft smooth and ciliated	60	Ischnurg		383.
	a7. Hind tibuse with the spurs all long and equal 5. Hind tibuse with the outer medial spur not more than two-thirds length	61	Isocentri	œ, [p	385.
(of inner rons flattened and produced to a rounded extremity, fore wing of male with tufts	87	Pyrausta	, p	429.
2 F	of hair on inner margin, hind wing with tufts near lower angle of cell rons produced to a pointed conical promi- nence		LOXONEPI PHLYCTÆ	q)	405.
r F	rons with a rounded prominence Maxillary palpi filiform, hind wing with veins 4, 5 approximated for a short dis-			[P	407.
<i>b</i> ³]	tance Maxillary palpi dilated with scales, hind wing with veins 4, 5 not approximated towards origin		Procedem Metasia,	[P	426. 121.
				_	

Genus ORTHORAPHIS, nov

Type, O. obfuscata, Hmpsn

Range Ceylon.

 b^2

 c^2 d^2

Palpi with the 2nd joint porrect and fringed with hair above and below, the 3rd upturned, well developed, and acuminate, maxillary palpi large and dilated with scales at extremity; frons rounded; antennæ thickened and flattened, tibiæ with the outer spurs nearly as long as inner. Fore wing long and narrow; the outer margin excised below apex and towards outer angle, excurved at middle, vein 3 from before angle of cell, 4,5 stalked; 6 absent; 7 straight and well separated from 8, 9 Hind wing with vein 3

from near angle of cell, 4, 5 stalked, 6, 7 from upper angle, 7 anastomosing with 8, the outer margin excised below apex and towards anal angle.

4763. Orthoraphis obfuscata, Hmpen Ill Het ix, p 161, pl 172, fig 4

of. Yellowish white suffused with black-brown, palpi black at sides, abdomen ringed with white. Fore wing with the pale ground-colour almost confined to the inner area, a series of pale



Fig 149 Orthoraphis obfuscata, 3

specks on costa, a slightly sinuous pale antemedial line outlined with black towards inner margin , a black discocellular lunule with pale outer edge, a pale sinuous submarginal Hind wing pale; a pale sinuous submarginal line, the area beyond it suffused with fuscous, some fuscous inside it below vein 2,

a black speck at anal angle Underside of hind wing and costal area of fore wing irrorated with black.

Hab. Ceylon. Exp. 18 millim

Genus SUFETULA.

Sufetula, Wik Cat. xix, p 946 (1859) Mirobriga, Wik Cat xxvii, p 131 (1863) Lestrina, Wik. Cat xxvii, p 182 Pseudochoreutes, Snell Tijd v Ent xx111, p 202 (1880)

Type, S sunidesalis, Wlk.

Range N E India; Ceylon, Malayan subregion.

Palpi upturned, the 2nd joint moderately scaled and not reaching vertex of head, the 3rd well developed and acuminate, maxillary palpi long and dilated with scales; from rounded; a tuft of hair between antennæ, which are chiated; spurs of equal length. Fore wing with the outer margin excised below apex; vein 3 from before angle of cell; 4, 5 from angle, 7 and 10 well separated from 8, 9 Hind wing with vein 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8; the outer margin excised below apex and towards anal angle.

4764. Sufetula sunidesalis, Wik Cat. xix, p 947 Mirobriga albicans, Wik Cat xxvii, p 132 Lestrina flexalis, Wik Cat xxvii, p 132 Pseudochoreutes choreutalis, Snell Tyd v Ent xxiii, p 202, &

xxvii, pl 6, fig 8



d. Brownish grey, head, palpi, and base of abdomen marked with fuscous. wing with the costa fuscous, with oblique pale antemedial strige and three pale annulate postmedial spots, a prominent

Fig 150 - Sufetula sunidesalis, o. . . black discocellular spot; a pale dark-edged submarginal line excurved between veins 7 and 8, with black patch beyond it at costs, a dark marginal crenulate line. Hind wing with diffused fuscous antemedial band, a discocellular speck, a pale sinuous postmedial line, a fine dark crenulate marginal line and a line through the cilia.

Hab Sikhim, Margharita, Assain; Ceylon, Malayan subregion

Exp 14 millim

4765 Sufetula rectifascialis, n sp

Head, thorax, and abdomen fuscous and white, palpi with the extremity of 2nd and 3rd joints white, wings pale suffused with fuscous brown. Fore wing with oblique antemedial line, with whitish band on its inner edge, a black discocellular spot, three pale annuli on outer half of costa, an oblique postmedial line with white band on its outer edge bent inwards at vein 6. Hind wing with oblique straight ante- and postmedial lines, the former with the black discocellular spot on it, the latter with white band on its outer edge, a submarginal line waved towards anal angle.

Hab Ceylon (Pole) Exp, & 12, Q 14 millim. Type m B M.

Genus MASSEPHA

Massepha, Wik Cat xvii, p 488 (1859)

Type, M absolutalis, Wlk. Range India, Ceylon, Java

Palpi upturned, the 2nd joint moderately fringed with scales in front and not reaching vertex of head, the 3rd well developed and acuminate, maxillary palpi minute, frons rounded, antennæ of male annulated, tabiæ with the outer spurs two-thirds length of inner. Fore wing with the apex acute and somewhat produced; veins 3, 4, 5 from angle of cell; 7 well separated from 8, 9, to which 10 is approximated Hind wing with the cell short, veins 3, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8

SECT I Hind wing with two slight indentations of the outer margin below veins 7 and 6

4766 Massepha absolutalis, Wil. Cat xvii, p 489, C. & S no 4332.

Physematia pollutalis, Snell Tyd v Ent xxiii, p 240, & xxvii, pl 4, fig 10



Fig 151 —Massepha absolutalis, of

Ochreous white, thickly striated with brown Fore wing with a dark spot below middle of cell, some dark specks on costa, an ill-defined pale submarginal line bent inwards at vein 2, the area beyond it somewhat darker,

with a marginal series of dark specks Hind wing with the apical area darker; a marginal series of dark specks

The Bhután specimen has the basal area of fore wing, the marginal area, and the apical area of hind wing prominently dark.

Hab Punjab, Bhutan, Calcutta; Ceylon, Java. Exp. 16-

22 millim.

4767 Massepha bengalensis, Moore, Lep Ath p 211, C & S

Pure white; thorax with black-brown spots, legs and abdomen banded with black. Fore wing with three series of black spots on basal area, a discocellular spot, a postmedial spot on costa, a postmedial line nearly straight from costa to vein 3, then retracted to lower angle of cell, a small spot on the cilia below apex and two larger spots above outer angle. Hind wing with subbasal spot; a diffused oblique antemedial band with a discocellular spot beyond it and met at inner margin by a sinuous postmedial band arising from a spot on costa and sending streaks inwards below cell, a sinuous submarginal band and a marginal band

Hab. Calcutta, Khasis. Exp. 20 millim.

SECT II Hind wing with the outer margin evenly curved

4768 Massepha carbonalis, Warr A M N. H (6) xvu, p. 148

d. Uniform glossy black-brown. Hab Khásis Eup 16 millim

Genus AULACOPTERA, nov

Type, A fuscinervalis, Swinh

Range Assam.

Palpi upturned and slender, the 2nd joint reaching vertex of head, the 3rd long and acuminate; maxillary palpi filiform, from rounded; antennæ annulate, tibiæ with the outer spurs about two-thirds length of inner. Fore wing with vein 3 from before angle of cell, 4, 5 from angle, 7 straight and well separated from 8, 9, to which 10 is approximated, male with vein 11 curved and running round a furrow of somewhat ribbed membrane below the costs. Hind wing with vein 3 from angle of cell, 4, 5 approximated for a short distance; 6, 7 from upper angle.

4769. Aulacoptera fuscinervalis, Swinh A M N H (6) xvi, p 300



Fig 152 Aulaeoptera fusomervalis, d }

o Whitish suffused with pale brown; palpi fuscous at sides. Forewing with the veins streaked with brown; three dark spots on costa, an ill-defined antemedial line angled on median nervire; a streak beyond discocellulars, a postmedial line, composed of a series of short streaks,

very highly excurved from costa to vein 3, then retracted to

below angle of cell, the margin brown. Hind wing uniform whitish

Hab Khásis, Nágas. Eip 20 millim

Genus XANTHOMELÆNA, nov.

Type, X schematias, Meyr

Range Burma, Malayan subregion to Celebes

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed and acuminate, maxillary palpi small and filiform; frons rounded, antennæ of male thickened and flattened, tibiæ with the outer spurs half the length of inner, abdomen long and slender with large protrusible anal tufts. Fore wing long and rather narrow, the cell short, vein 2 from angle. 3 approximated for some distance to 4, 5, which are on a long stalk, 7 curved and approximated to 8, 9, male with a large tuft of scales on underside in end of cell from subcostal nervure met by a slight fringe from median nervure, female with a small tuft from subcostal nervure. Hind wing with the cell short, vein 3 from angle, 4, 5 approximated for some distance, 6, 7 shortly stalked.

4770. Xanthomelæna schematias, Meyr Trans Ent Soc 1894, p 458

Orange-yellow, abdomen with paired black spots on 3rd segment. Fore wing with obliquely placed antemedial black spots on costa



Fig 153 Xanthomelæna schematias, d

and above inner margin; a medial black bar from costa to vein 5, a postmedial spot above inner margin, a submarginal spot between veins 3, 4, the interspaces pale and thinly scaled. Hind wing yellowish white, sometimes with apical black spot and submarginal spot on vein 3

Hab. Tenasserim, Pulo Laut, Borneo, Sumbawa, Celebes. Exp. 20 millim

Genus RHIMPHALEODES.

Rhimphaleodes, Hmpsn Ill. Het ix, p 174 (1893)

Type, R. macrostigma, Hmpsn.

Range Ceylon

Differs from Rhmphalea in the 2nd joint of palpi being almost smoothly scaled, the 3rd well developed, naked, and acuminate; antennæ shorter than fore wing, the shaft smooth, male with the basal joint dilated with tufts of hair from inner side, the shaft excised at base, then fringed with scales on inner side for a short distance, hind tibiæ with a tuft of long scales from extremity, the 1st joint of tarsus fringed with long scales on each side at base

4771. Rhimphaleodes macrostigma, Hmpsn III. Het. ix, p 174, pl 174, fig 9

d Whitish, slightly tinged with fuscous, head and collar fuscous, abdomen ringed with fuscous. Fore wing with fuscous



Fig 154 -Rhimphaleodes macrostiqma, d i discocellular patch with

streak below base of costa, an oblique subbasal band from median nervure to inner margin; a curved antemedial line; a small quadrate black spot in cell and large deep black rounded discocellular patch with small white specks near its

upper edge, the postmedial minutely waved line straight from costa to vein 5, excurved between veins 5 and 2, then retracted to below angle of cell and with an oblique line across its sinus, the outer area fuscous, its inner edge sinuous and only leaving a narrow pale band beyond the postmedial line. Hind wing with the veins near end of cell streaked with fuscous, the postmedial line indistinct, minutely waved, very much bent outwards between veins 5 and 2 and with a line across the sinus, the apical area fuscous, a series of spots inside the margin and a patch near anal angle.

Hab Ceylon Exp. 26 millim.

Genus PYCNARMON.

Pycnarmon, Led Wien ent Mon 1863, p 441 Aripana, Moore, Lep Ceyl in, p 312 (1886)

Type, P jaguaralis, Guen

Range Oriental and Australasian subregions

Palpi upturned, the 2nd joint broadly scaled in front and reaching vertex of head, the 3rd long and acuminate, maxillary palpi minute and filiform, frons rounded, tibus with the outer spurs about half the length of inner, abdomen with lateral tufts on terminal segments. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with veins 3, 4, 5 from angle of cell, which is short, 6, 7 from upper angle, 7 anastomosing with 8.

- SECT I (Pycnarmon) Antennæ of male with the shaft thickened to about one-third length, where there is a cleft fringed with hair on each side
- A. Antennæ of male unth a tuft of hair projecting from the upper side of the cleft and diminishing teeth of scales beyond it for a short distance
- 4772. Pyonarmon jaguaralis, Guen Delt & Pyr. p 288, C. & S. no 4816

Pure white, antennæ fuscous, fore tibiæ spotted with black,

collar, tegulæ, and thorax black-spotted, abdomen with paired black spots on basal and 3rd segments, the three terminal segments

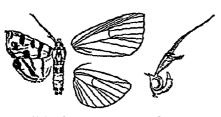


Fig 155 - Pycnarmon joguaralis, &

orange, the anal tust black Fore wing with black sub-basal and antemedial bands; a large black discocellular spot, a postmedial spot from costa to vein 5 and another from vein 2 to inner margin, an apical black spot and a submarginal spot between veins 4 and 2 Hind wing

with black discocellular line continued and becoming orange towards anal angle, a postmedial black line from costa to vein 2; a submarginal line with a black spot on it on vein 2 and terminating in a small orange patch at anal angle, an apical black spot, both wings with black marginal lines and brownish line through base of cilia

Hab Dharmsála, Sikhim, Assam, Malacca, Celebes, Mysol; Waigiou, New Guinea, Solomons Exp., & 30, & 34 millim

B Antennæ of male without tuft of hair from the cleft or scale-teeth beyond it

4773 Pycnarmon virgatalis, Moore, P Z S 1867, p 92, pl 7, fig 10, C & S no 4317

Differs from jaguaralis in the abdomen having a pair of black spots on the 2nd segment only. Fore wing with the discocellular spot replaced by a band; a band from vein 5 to inner margin just beyond the cell and postmedial band from costa to vein 5, a submarginal band from vein 5 to inner margin and a marginal band. Hind wing with the postmedial band continued to anal angle, the submarginal ending at vein 2; a marginal band.

Hab Dharmsála, Sikhim, Bhután; Khásis; Ceylon Exp. 20 millim

4774 Pycnarmon abraxalis, W71 Cat xxxiv, p. 1349, C & S. no 4313

White, the head and thorax striped with fuscous, legs tinged with fuscous, abdomen with paired lateral series of black spots, the terminal half orange with black spot on the anal tuft. Fore wing with fuscous subbasal and antemedial bands, a large discocellular patch, a spot beyond lower angle of cell with large spot between it and inner margin; a postmedial patch from costa to vein 5; submarginal spots below middle and above outer angle; a marginal fuscous band widest at costa. Hind wing with discocellular spot, a sinuous postmedial band terminating at the large anal orange patch, which extends from vein 4 to anal angle and has an irregular fuscous patch on its inner edge, sending a tooth

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inwards on vein 2 and with three black spots on it; a subapical fuscous spot and marginal band ending at the orange patch.

Hab Sikhim; Khásis. Exp. 36 millim.

SECT. II. (Arpana). Antenna of male simple and caliated.

A. Fore wing of male below with a fringe of large curved scales in the cell arising from the subcostal nervure.

4775 Pycnarmon alboflavalis, Moore, Lep. Atk p 220, C & S

d White, thorax with the vertex black, abdomen with paired black spots on basal and 3rd segments and a black band on 5th segment. Fore wing with two black costal spots and three bands from median nervire to inner margin on basal area, a discocellular black spot and large spots on origin of veins 2 to 5; a postmedial line, straight from costa to vein 5, then bent outwards and fine, a spot below it on inner margin, the marginal area orange with black speck at apex and double submarginal black spot on vein 4. Hind wing white, with black spot at base of inner margin, a double series of black spots from below lower angle of cell to anal angle; the marginal area orange, with submarginal black spot on vein 4 and some specks on margin towards anal angle.

Hab. Sikhim, Andamans Exp 20 millim

B Fore wing of male with no fringe of scales in the cell below.

4776 Pycnarmon caberalis, Guen. Deli & Pyr. p 284, C. & 8 no. 4810

Zebronia abdicalis, Wik Cat xvii, p. 480, Led Wien ent. Mon 1863, pl 17, fig 12

Conchylodes corycialis, Snell Tyd. v. Ent xxiii, p. 238, & xxvii, p 44, pl 1v, fig 6

Pure white, tegulæ each with a black spot, fore and mid legs black-spotted, abdomen with pairs of lateral black spots near base, some yellow on terminal segments, and an orange and black band before anal tuft Fore wing with numerous black specks on costa, with brown strize from them to subcostal nervure, three larger spots also being developed on basal half and two U-shaped spots beyond the middle, traces of an obliquely sinuous antemedial line, a black spot on mner margin near base and discocellular spot, which latter in the form caberalis is brown, in abdicalis black; a postmedial brown line from vein 5 terminating in a black spot on inner margin, a brown line or band from the outer of the two U-shaped marks to vein 4, two conjoined apical black spots with a more or less developed and defined band from them to ven 4, which has a submarginal black spot below it. Hind wing with discocellular black speck, a postmedial brown line from vem 5 terminating in a black spot on inner margin, a brown line from costs to vein 4; a black apical spot and submarginal spot below vein 4; some slight brown suffusion on the margin; both wings with fine marginal brown line and line through the ciha

Some specimens have an ochreous brown tinge.

Hab China, Formosa, throughout India, Ceylon, and Burma; Pulo Laut, Borneo, Java, Celebes; Flores, Sumbawa, Fiji Evp 20-22 millim.

4777. Pycnarmon meritalis, Will Cat xvii, p 479; C & S no 4312 Zebronia plexippusalis, Wlk Cat xvii, p 485. Conchylodes baptalis, Snell Trid v Ent xxiii, p 238, & xxvii, p 44, pl. 4, fig 7 Aripana annulata, Warr A M N H (6) xviu, p 168

Differs from caberalis in the fore wing being without the numerous black spots and brown strie on the costa, two black spots and the two U-shaped marks only being developed, a black speck in cell and a small discocellular spot, the antemedial and two postmedial lines faint and yellow, the outer margin with a maculate black line becoming a fine line at vein 4. Hind wing with the lines faint and yellow.

Hab. China; Sikhim; Ceylon; Borneo, Java; Celebes, Sum-

bawa; Australia Exp 16-18 millim.

4778. Pycnarmon lactiferalis, Will Cat xvii, p 480, Hmpsn Ill. Het 1x, pl 173, fig 28, C & S no 4311 Zebroma argyria, Butl Ill Het in p 76, pl 59, fig 9 Conchylodes paucipunctalis, Snell Trans Ent Soc 1890, p 633, pl xix, fig 2

Differs from mentalis in the black spots near base of costs of fore wing, in cell, and on discocellulars being larger; the two Umarks minute or only appearing as black specks; the antemedial line of fore wing and the two postmedial lines of both wings developed into ill-defined yellow bands, the black on margin replaced by a yellow band from apex to vein 4 of each wing

Hab. Japan, China, N W and E Himalayas; Ceylon; Burma;

Pulo Laut, Borneo, Celebes. Exp 24 millim.

4779. Pycnarmon æriferalis, Moore, P. Z S 1877, p. 618, C & S

Differs from lactiferalis in being ochreous; the black spots much Fore wing with the antemedial line brown and curved: the postmedial line blackish, straight from the costs to the submarginal black spot, which is further from the margin, then retracted to near angle of cell, and straight to inner margin; an apical black Hind wing with the postmedial lines black, the submarginal spot further from the margin,

Hab. Sikhim; Andamans Exp 22 millim

4780 Pycnarmon marginalis, Snell Trans Ent Soc. 1890, p 635

Q Glossy white, anal tuft black above Fore wing with black spots at base of costa and vein 1, subbasal and antemedial larger spots on costa, a discocellular spot, the postmedial line strongly marked and outwardly oblique from costa to vein 2, then obsolescent and retracted to below angle of cell Hind wing with discocellular spot, the postmedial line nearly straight from costs to vein 2, then retracted to below angle of cell, both wings with very prominent broad black marginal line and a fine line through the cilia

Hab Sikhim, Khásis Exp 20 millim

4781. Pycnarmon nebulosalis, n sp

2. White thickly mottled with brown Fore wing wholly brown except some white specks near base, a patch in cell, an apical patch, and a spot at middle of outer margin, traces of a dark waved antemedial line, a dark-edged white discoccilular spot; a dark waved postmedial line defined by white and bent outwards between veins 7 and 4; a dark marginal line Hind wing with the basal area white, a fuscous discoccilular spot, an irregularly-waved postmedial line defined by white and with some diffused fuscous on its inner edge; a dark marginal line with some dentate white marks on its inner edge

Hab Ceylon (Pole). Exp 18 millim Type in B M.

Genus RAVANOA.

Ravanoa, Moore, Lep Ceyl 111, p 284 (1885)

Type, R. arphralis, Wlk.

Range Ceylon, Burma, Borneo, Mysol

Palpi obliquely upturned and not reaching vertex of head, the 2nd joint broadly fringed in front, the 3rd well developed and acuminate; maxiliary palpi short and filiform, frons flat and oblique, antennæ of male minutely chated, tibiæ with the spurs long and nearly equal. Fore wing with the apex somewhat produced and the outer margin oblique, veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, 10 approximated to 8, 9. Hind wing with the cell short; veins 3, 4, 5 from the angle, 6, 7 from upper angle, 7 anastomosing with 8

4782. Ravanoa xiphialis, Wik Cat xvn, p 488
Zebronia bilineolalis, Wilk Cat xxxiv, p 1850, Moore, Lep Ceyl
ni, pl 180, fig 9, C & S no 4120

White; the head and thorax suffused with cupreous brown; abdomen ringed with brown a black band before the anal tuft.



Fig 156
Ravanoa xiphialis, o

Fore wing with brown costal fascia, an antemedial line, a discocellular spot, the postmedial line straight from costa to vein 2, then retracted and joining the discocellular spot, and straight to inner margin, a curved submarginal and a marginal band. Hind wing with oblique antemedial and medial lines, the latter terminating at anal angle,

a submarginal band terminating at vein 2, a maiginal band.

Hab Ceylon, Burma, Borneo, Mysol Exp 18 milim.

Genus REHIMENA.

Rehimena, Will Cat xxxiv, p 1492 (1865) Oyclarcha, Swinh A M N H (6) xiv, p 203 (1894)

Type, R phrynealis, Wlk

Range. India, Ceylon, Burma; Borneo.

Palpi upturned, the 2nd joint slightly fringed in front and not reaching vertex of head, the 3rd well developed and acuminate, longer in female than in male, maxillary palpi well developed and filiform; frons rounded, antennæ of male ciliated, tibiæ with the outer spurs half the length of inner. Fore wing with the apex and outer margin rounded, vein 3 from near angle of cell, 4, 5 from angle, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with vein 3 from angle of cell, which is short, approximated to 4, 5 for a short distance, 6, 7 from upper angle, 7 anastomosing with 8.

4783 Rehimena phrynealis, Wik Cat xviii, p 630, Moore, Lep. Ceyl iii, pl 181, fig 5 C & S no 4138
Rehimena dichromalis, Wik Cat xxxiv, p 1492.
Botys haliusalis, Wik Cat xviii, p 695

Fuscous shot with purple; palpi and frons orange Fore wing with orange-yellow antemedial band expanding and becoming very broad at costa, its outer edge dentate; a subquadrate yellow patch on costa before apex, widest at costa, a marginal orange line widening at apex, cilia orange, with more or less fuscous towards outer angle Hind wing fuscous; the cilia often orange towards apex. Underside of thorax, the legs, and hind wing whitish

Hab. Throughout India, Ceylon, and Burma, Borneo.

Exp 24 millim

4784 Rehimena striolalis, Snell Trans Ent Soc 1890, p 604.
Cyclarcha atristrigalis, Swinh A M N H (6) xiv, p 204
Cyclarcha flavinervis, Swinh A M N H (6) xiv, p 204
Cyclarcha pallidicostalis, Warr A M N H (6) xvii, p 138

J. Ochreous; palpi and legs slightly marked with fuscous.



Fig 157 —Rehimena striolalis, & }

Fore wing with a purplish fuscous speck at base, two short streaks below base of median nervure; two in end of cell, a series in the interspaces beyond the cell, not nearly reaching the margin. Hind wing with slight fuscous suffusion on outer area.

The variety flavinervis has the whole of the interspaces of fore wing filled by continuous streaks nearly reaching the outer margin; the abdomen, except anal tuft, and whole of hind wing except the margin suffused with fuscous.

2 with the streaks of fore wing ill-defined and represented by fuscous suffusion on basal area and a patch beyond the cell

Hab. Sikhim, Khásis. Exp. 20-22 millim

Genus ZINCKENIA.

Hymenia, Hubn Verz p 360 (? 1818), non descr Zinckenia, Zell Lep. Caffr in K. Siensk Vet -Ah Handl 1852, p 55.

Type, Z perspectales, Hubn.

Range The tropical and warmer temperate zones.

Palm upturned, the 2nd joint broadly scaled in front and not reaching vertex of head, the 3rd well developed and acuminate; maxillary palpi long and filiform, frons rounded, antennæ of male nearly simple, the base of shaft excised and a tuft of hair from extremity of basal joint, tibiæ with the spurs long and nearly equal. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with vein 3 from angle of cell, 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8

4785. Zinckenia perspectalis, Hubn Schmett. Eur., Pyr fig 101,
C & S no 4261

Spoladea exportalis, Guen Delt & Pyr. p 227 Zinckenia primordialis, Zell K Vet Ak Handl. 1852, p 56

Black-brown, palpi with the 2nd joint banded black and white, abdomen ringed with white. Fore wing with curved white antemedial line, a white spot in end of cell; the postmedial line represented by a white band from costa to vein 5, some white specks (often obsolete) beyond the excurved portion between veins 5 and 2, and a sinuous white line (often reduced to specks) on the retracted portion between vein 2 and inner margin, the cilia white below apex and above outer angle. Hind wing with oblique white medial band not reaching the costa and ending near anal angle, broad below costa and beyond lower angle of cell, then narrowing, the cilia white below apex and at middle.

Hab. Nearctic, Neotropical, and Ethiopian regions; Ceylon,

Burma, Java, Tahiti. Exp. 20 millim.

4786. Zinckenia fascialis, Cram Pap Exot iv, pl 398, fig O
Phalma angustalis, Fabr Mant Ins 11, p 222
Phalma recurvalis, Fabr Ent Syst 111, pt 2, p 237, C & S no 4262
Hymenia diffascialis, Hubn Verz p 361
Hydrocampa albifascialis, Boud Faun Ent Madag, Lép p 119,
pl 16, fig 7

Differs from perspectals in being browner Fore wing with

Fig 158 - Zinckenia fascialis, & +

no antemedial line, a medial black-edged white band developed, not reaching the costa, its outer edge irregular and toothed on vein 2. Hind wing with the band wider, more regular, less oblique, and only slightly narrowing to inner margin.

Hab Neotropical and Ethiopian regions, Palæarctic Asia from Syria to Japan the whole Oriental and Australian regions. Eur. 24 millim

Genus TABIDIA.

Tabidia, Snell Tijd v Ent xxiii, p 219 (1880)

Type, T insanalis, Snell, from Celebes, Duke of York and Shortland Islands

Range Ceylon, Malayan and Australasian subregions

Palpi upturned, the 2nd joint not reaching vertex of head and slightly scaled, the 3rd long and acuminate, maxillary palpi minute and filiform; frons rounded, antennæ of male thickened and flattened, the outer spurs about two-thirds length of inner. Fore wing of male with a recumbent valve of large scales from base of median nervure above; veins 3, 4, 5 well separated at origin, 7 straight and well separated from 8, 9, to which 10 is closely approximated Hind wing with the cell rather short; veins 3, 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8

In the typical species vein 2 of the fore wing arises near base of median nervure

4787 Tabidia aculealis, Will Cat xxxiv, p 1427 Isopteryx trisignata, Moore, Lep Ceyl iii, p 306, C &. S no 4435.

d Head and thorax white, the collar and shoulders spotted with fuscous, abdomen rufous and fuscous, whitish at base. Fore wing whitish, the basal half of costa dark, three large dark annuli, at base, middle, and end of cell, the upper part of their



Fig 159 — Tabidia aculealis, 3 1

rings broadest, the 1st connected with a dark mark at base of inner margin, and with another on outer side below median nervure connected with the inner margin by an obscure line, the postmedial line arising from a dark costal mark, minutely dentate from costa to vein 2, then retracted to

lower angle of cell, the area beyond it pale fulvous Hind wing with the basal area whitish; antemedial and medial oblique lines ending near anal angle, above which there is a fuscous streak, the area beyond the medial line pale fulvous; a dark line through the cilia.

Hab. Ceylon, Pulo Laut, Sula Islands, Celebes Erp. 18 millim

Genus EURRHYPARODES

Eurrhyparodes, Snell Tijd v Ent xxiii, p 215 (1880) Molybdantha, Meyr Trans Ent Soc. 1884, p 309

Type, E bracteolalis, Zell

Range. Ethiopian, Oriental, and Australian regions

Palpi upturned, the 2nd joint broadly scaled in front, the 3rd short and blunt, maxillary palpi nearly as long as the labial and dilated with see es at extremity, frons rounded, antennæ annu-

lated. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9. Hind wing with the outer margin xcised below apex; the cell short, veins 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing strongly with 8

SECT. I. (Molybdantha). Fore wing of male with no postmedial glandular swelling below costs.

4788. Eurrhyparodes tricoloralis, Zell K Vet -Al. Handl 1852, p 31. Isopteryx abnegatalis, Wik Cat xvii, p 404, Moore, Lep Ceyl in, pl 179, fig 7, C & S no 4436 (part)
Eurrhyparodes confusalis, Warr. A M N. H (6) xviii, p 218.

Yellow, the head and thorax largely marked and the abdomen ringed with fuscous and leaden-coloured scales. Fore wing with the costa striated with fuscous, an ill-defined waved fuscous subbasal band suffused with leaden scales and formed of conjoined striæ; two similar conjoined spots in cell connected with the inner margin by a band; similar wider postmedist and marginal bands conjoined towards inner margin, the latter leaving more or less yellow on the margin. Hind wing with fuscous leaden-suffused discocellular spot and medial spot on inner margin, a postmedial costal patch, a very irregular broad marginal band interrupted by a yellow patch below apex and an irregular patch at middle, and emitting some striæ or an irregular bar from the middle of its inner side towards the postmedial costal patch

Hab W. & S. Africa, Punjab, Nilgiris, Ceylon, Java; Australia. Exp. 20 millim.

SECT. II. (Eurrhyparodes). Fore wing of male with a large postmedial glandular swelling below costs, which is slightly excised toward apex

4789. Eurrhyparodes bracteolalis, Zell K Vet -Al Handl 1852,p. 30; C. § S no 4486 (part) Isopteryx plumbalis, Guen Delt & Pyr p 231. Isopteryx accessalis, Wik Cat xvii, p 405, Moore, Lep. Ceyl. in, pl 179, fig 6, C & S no 4487

Differs from trucolorals in the abdomen being brown, fuscous



Fig 160
Eurrhyparodes bracteolalis, 2

and leaden-coloured with only the base yellow, the whole fore wing occupied by conjoined patches of leaden-suffused fuscous striae, except small yellow antemedial and larger postmedial patches below median nervure, and a postmedial irregular maculate band from costa to vein 5 Hind

wing without the subapical and medial marginal yellow patches.

Hab. W & S Africa, Japan, China, throughout India, Ceylon, and Burma, Java; Celebes, Australia, New Exp. 20 millim.

Genus HETEROCNEPHES

Heterocnephes, Led Wien ent Mon 1863, p 402 Charitoprepes, Warr A M N H (6) xvii, p 136 (1896)

Type, H scapulalis, Led, from Amboina and the Solomons.

Range N E India, Burma, Malayan subregion to the Solomons. Palpi upturned and reaching vertex of head, the 2nd joint very broadly and quadrately scaled, the 3rd with a long pointed tuft in front, maxillary palpi filiform and long, frons oblique; antennæ of male minutely chiated and as long as fore wing, tibiæ with the outer spurs about half the length of inner. Fore wing with the apex somewhat produced and the outer margin oblique, veins 3, 4, 5 from angle of cell; 7 approximated to 8, 9 for about one-third length, 10 also approximated to 8, 9. Hind wing with the cell about half the length of wing, veins 3, 4, 5 from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8

4790. Heterocnephes lymphatalis, Swinh P Z S 1889, p 420, pl 44, fig 7

Varies from b'ack-brown to bright rufous, from with lateral



Fig 161 Heterocnephes lymphatalis, of

white lines, palpi below, pectus, and legs whitish, the tibiæ marked with black. Fore wing with large golden-yellow black-edged medial patch from costa not quite reaching the inner margin, with the dark discocellular line on it, a pale subcostal spot towards apex, with black speck on its outer

side. Hind wing with large white black-edged postmedial patch, its outer edge indented, and terminating in a point below. Underside greyish

Hab Khásis, Sibságar; Nágas, Burma; Perak, Pulo Laut;

Java Exp 28 millim

4791. Heterocnephes lubricosa, Warr A M N H (6) xvii, p 136

2. Brown, head and thorax tinged with grey; abdomen ringed with white. Fore wing with white fascia on medial part of costa; a black spot in cell, both wings with discocellular lunule; the outer area white, irrorated and minutely striated with brown, the veins crossing it black and a black marginal line, a dark brown patch at apex of fore wing, cilia tipped with brown Underside with the basal half of both wings and the inner area of hind wing suffused with white

Hab Khásis Exp 30 millim

Genus AGROTERA.

Agrotera, Schrank, Fauna Bosca, 11, pt 2, p 163 (1798) Nistra, Wlk Cat xv11, p 488 (1859) Sagariphora, Meyn Trans Ent Soc 1894, p 460

Type, A nemoralis, Scop, from Europe

Range Palmarctic and Oriental Regions to New Guinea.

Palpi upturned and reaching vertex of head, the 2nd joint moderately scaled in front, the 3rd triangularly scaled and set on at an angle; maxillary palpi filiform, frons rounded; antennæ chated and annulated; tibiæ with the outer spurs two-thirds length of inner, abdomen long, with slight lateral tufts. Forewing with veins 3, 4, 5 from angle of cell; 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the cell about half the length of wing, the discocellulars angled; veins 3, 4 from angle, 5 from or from just above angle; 6, 7 shortly stalked, 7 anastomosing with 8.

SECT. I Fore wing somewhat narrow, the apex produced.

4792 Agrotera effertalis, Wlk Cat xv11, p 348, Hmpsn Ill Het 1x, pl 174, fig 19, C \$ S no 4279.

Head, thorax, and abdomen pale yellow, spotted with orange, palpi fuscous; fore legs banded with fuscous, wings with the basal area pale yellow, spotted with orange, and bounded by an obscure waved line ending at anal angle of hind wing, the outer area purplish fuscous, fore wing with a yellow discocellular lumile on an orange patch, a sinuous postmedial line retracted at vein 2 of fore wing to below end of cell and terminating at vein 2 of hind wing; the cilia yellow below apex and towards outer angle of fore wing and on anal half of hind wing.

Hab Ceylon, Perak, Celebes Exp. 24 millim.

4793. Agrotera discinotata, Swinh A M N. H (6) xiv, p. 207 Agrotera grissola, Warr A M. N H. (6) xvii, p 139.

Differs from basinotata in having more orange-red markings on thorax and abdomen. Fore wing with the basal patch more prominently marked with red, its edge oblique, a more or less prominent dark-edged rufous discocellular lumile with orange line on it, and diffused dark marks beyond it between veins 5 and 2. Hind wing with no basal yellow patch, some diffused black markings, and a rufous speck beyond lower angle of cell

The Bhutan form has no diffused markings beyond lower angle of cell of either wing; the discocellular lumile of fore wing small;

the cilis white at the excision below spex.

Hab. Bhután, Khásis. Exp. 22 millim

4794. Agrotera basinotata, Hmpen Ill Het. viii, p 187, pl 155, ig. 18.

Differs from effertales in the head being rufous; the abdomen

purplish fuscous towards extremity. Fore wing with a dark sub-basal patch on the costa, the line bounding the yellow area more regular, a small rufous discocellular mark instead of the yellow lunule, the postmedial line obscure

Hab. Punjab, Bombay Presidency; Nilgiris, Cevlon, Burma

Exp 16 millim

SECT. II. Fore wing broader, the apex not produced.

A (Sagariphora) Hind tibue of male with tufts of long hair at extremity on inner and outer sides, the tarsus fringed with hair on outer side; hind wing with fringe of long hair on inner area below.

4795. Agrotera magnificalis, Hmpsn Ill Het. 1x, p 173, pl 174, rig 17
Sagariphora heliochlæna, Meyr Trans. Ent Soc 1894, p 461

Q. Differs from scissalis in the head being rufous, the abdomen.



Fig 162-Agrotera magnificalis, &. +.

fuscous, slightly rufous towards base, the thorax and basal half of fore wing thickly irrorated with orange, the base of hind wing pale, with only slight traces of orange and of the oblique line at lower

angle of cell, no white suffusion beyond the line except at costs of fore wing, the outer area and underside browner

d with the outer area of fore wing and the hind wing yellower. Hab Ceylon, Sumbawa Exp 32 millim

B Hind legs and inner area of hind wing smoothly scaled.

4796 Agrotera scissalis, Wik Cat xxxiv, p 1526

Head, thorax, and abdomen pale yellow irrorated with orange, the last fuscous towards extremity; palpi, fore tibiæ, and distal tarsal joints fuscous; wings with the basal half pale yellow irrorated with orange, and bounded by a nearly straight black line ending at anal angle of hind wing, the area beyond it suffused with white to the postmedial series of black specks and oblique black striga from costa of fore wing, outer area purplish fuscous; a marginal series of black specks

Hab Sikhim; Khásis; Nágas, Ceylon; Rangoon, Java Exp.

24 millim.

4797. Agrotera colatalis, Will Cat. xvu, p 488, Moore, Lep Ceyl. 111, pl 182, fig 10, C & S no 4365

Head and thorax metallic purplish grey, abdomen ochreous

Fore wing ochreous, with the costal area metallic purplish grey, the antemedial line arising from it, and the spots in cell and on discocellulars conjoined to it; the postmedial line purplish, excurved from costa to vein 2, then retracted, the area beyond it purplish except at outer angle. Hind wing ochreous, with a discocellular spot and postmedial line excurved below vein 5, the apical area and a patch near anal angle purplish.

Hab Ceylon, S.E. Borneo, Sumbawa; Celebes. Exp 20

millim.

4798. Agrotera leucostola, n sp

d Differs from colatals in being white; the head, collar, and costal area of fore wing fuscous. Fore wing with the basal inner area white, the two black spots in cell more differentiated, both wings with the leaden-suffused patches on apical area present, but not those towards inner margin. Hind wing with some ochreous on the submarginal line; the black spot at anal angle instead of above it

Hab Sikhim (Dudgeon); Nágas (Doherty). Exp. 20 millim. Type in B M

4799. Agrotera barcealis, Wik. Cat. xix, p. 942
Zebronia retractalis, Wik. Cat. xxxiv, p. 1350.
Zebronia indecisalis, Wik. Cat. xxxiv, p. 1352.
Leucinodes opalina, Moore, Lep Ceyl in, p. 289, pl. 179, fig. 10, C. & S. no. 4289

Opalescent white. Fore wing with traces of antemedial line with suffused yellow patches on its outer side, a dark discocellular line with suffused yellow patch beyond it, a submarginal slightly waved line bent outwards between veins 5 and 2, then retracted, the area beyond it fulvous yellow with a grey and fuscous band on it. Hind wing with black speck at lower angle of cell, with some diffused yellow beyond it, an indistinct waved submarginal line bent outwards between veins 5 and 2 and with diffused yellow beyond it, then greyish white; a subapical fuscous patch and the margin yellow at apex

Hab Ceylon, Sumatra; Pulo Laut; Borneo, Mysol. Evp.

18 millim

Genus ÆTHOLIX.

Ætholix, Led Wien ent. Mon 1863, p 437

Type, Æ flavibasalis, Guen.

Range India, Ceylon, Andamans, Borneo.

Palpi upturned and reaching vertex of head, the 2nd joint moderately scaled, the 3rd with a short triangular tuft in front; maxillary palpi filiform; frons rounded; antenna slightly longer than the fore wing and ciliated, tibia with the outer spurs about two-thirds length of inner, thorax with ridges of large flattened scales on underside, abdomen rather long, with lateral tufts. Fore

wing narrow, the apex produced and the outer margin oblique, veins 3, 4, 5 from angle of cell, 7 curved and approximated to 8, 9, to which 10 also is approximated Hind wing with the cell short, the discocellulars straight, veins 3, 4 from angle and approximated for a short distance, 5 from just above angle, 6, 7 from upper angle, 7 anastomosing with 8, the costal nervure and costa much arched at middle.

Association | Association

Palpi and frons black, vertex of head rufous, thorax and base



Fig 163 —Ætholix flavibasalis, o

of abdomen pale yellow with orange spots, abdomen purplish fuscous, the terminal segment banded with rufous, the anal tuft yellow Fore wing with the base yellow, spotted with orange, and bounded by the sinuous antemedial line, which has some

orange irroration beyond it, the medial area purplish fuscous; a discocellular black band with a yellow and orange mark on it; a postmedial sinuous line retracted at vein 2 to angle of cell, with a broad white band inside it above vein 2 and a narrow band outside its retracted portion, the outer area purplish fuscous, the cilia yellow below apex and towards outer angle. Hind wing with the base yellow spotted with orange, an oblique antemedial black line with spot on it at lower angle of cell, a little purplish fuscous suffusion inside it, and a broad white band beyond it bounded by a sinuous black line from costa to vein 2; the marginal area purplish fuscous

In the Ceylon race *cingalesa* the white band of hind wing is much broader than in the typical form and hardly narrows towards inner margin

Hab. Bombay; Ceylon, Andamans, Borneo Erp 22 millim.

4801 Ætholix indecisalis, Warr A M N H (6) xvii, p 148

Q. Grey, almost wholly suffused with brown and fuscous; palpi and antennæ ringed with black. Fore wing with the basal inner area rufous, oblique slightly irregular antemedial and medial black lines, the former defined by ochreous on its inner side, the latter on its outer, and joined below cell by a cuived dentate postmedial line, a hyaline spot in cell and speck below the cell, apical area suffused with ochreous; a marginal black line; ciha ochreous, dark at middle. Hind wing with some hyaline markings in end of cell and on disk; a curved medial black line and ill-defined irregular postmedial line, a marginal black line.

Hab Khásis Exp 16 millim.

Genus PAGYDA

Pagyda, Wlk Cat xvii, p. 487 (1859) Synclera, Led Wien ent Mon 1863, p 444

Type, P salvalis, Wlk

Range Japan, Oriental region.

Palpi upturned and reaching vertex of head, the 2nd joint very broadly and quadrately scaled, the 3rd with a long pointed tuft in front, maxillary palpi filiform, frons rounded, antennæ annulated with rings at the joints, tibiæ smoothly scaled, the spurs nearly equal, except the outer medial spur of hind tibiæ which is about half the length of the inner. Fore wing with veins 3, 4, 5 from angle of cell. 6 from well below upper angle, 7 widely separated from 8, 9, 10 approximated to 8, 9. Hind wing with the cell short, vein 3 from angle, 4, 5 approximated for a short distance or well separated, 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I (Pagyda) Mid tibus of male dilated with a fold containing a tuft of long hair.

4802 Pagyda auroralis, Moore, Lep Atk p 215, pl 7, fig 17, C & 8 no 4319

Pagyda rubricatalis, Swinh Trans Ent Soc 1890, p 282

Head, thorax, and abdomen orange and yellow, palpi with the 2nd joint ringed with fuscous, thorax striped with orange, abdomen ringed with white towards extremity. Fore wing pale, with basal, subbasal, antemedial, and medial oblique orange bands tinged with red towards inner margin, a postmedial inwardly oblique line terminating at vein 3, two submarginal orange bands. Hind wing suffused with blood-red, the costal area pale, the outer area yellowish, a pale discocciliular spot and pale postmedial line, retracted along vein 2, then excurved again, a pale submarginal line dentate inwards on vein 2

Hab Sikhim, Khásis, Rangoon Evp 22 millim

4803. Pagyda salvalis, Walk Cat xvii, p 487, Moore, Lep Ceyl. iii, pl 182, fig 6, C & S no 4330

Botys arbiter, Butl 111 Het iii, p 77, pl 59, fig 18

Botys arbiter, Butl 111 Het in, p 77, pl 59, fig 18

Head orange, palpi with two black semicircles on 2nd joint,



Fig 164 —Pagyda salvalis, o

line, slightly oblique antemedial and medial orange lines arising from black specks on the costa, an inwardly oblique postmedial

frons with a black-and-white lateral line, thorax greyish with orange stripes, abdomen greyish, the terminal half fulvous with black-and-white segmental rings and a broad white ring before the anal tuft, wings grey. Fore wing with the costa orange, an outwardly oblique subbasal orange and medial orange lines arising

line arising from a black speck on the costa and terminating at vein 3; a submarginal fulvous-orange band curved inwards near costa. Hind wing with oblique ante- and postmedial orange lines terminating near anal angle, a submarginal band not reaching the costa, both wings with fine marginal dark lines, the cilia orange at base, grey at tips

Hab Japan, Sikhim, W & S India, Ceylon; Burma, Pulo

Laut, Borneo Evp 22-26 millim.

4804. Pagyda botydalis, Snell Midd-Sum iv, Lep p 69, pl 5, fig 9. Pagyda aurantialis, Hmpsn Ill Het ix, p 169, pl 173, fig 17

Orange-yellow, palpi orange and fuscous, throat white, abdomen ringed with white towards extremity. Fore wing with oblique subbasal deep orange line, nearly erect and almost straight antemedial and medial lines arising from black specks on the costa, a postmedial inwardly oblique line arising from a speck on the costa and terminating at vein 3, a somewhat obscure submarginal line, highly dentate from costa to vein 3, then incurved. Hind wing with antemedial, postmedial, and submarginal oblique lines ending near anal angle. Both wings with a fine marginal dark line, the cilia pale, with an orange line through them.

Hab. Sikhim, Khásis, Nágas, Čeylon; Pulo Laut, Sumatra

Exp. 22 millim.

4805 Pagyda discolor, Swinh A M N H (6) xiv, p 197.

J. Differs from salvalis in the wings having the lines narrower, fore wing with the submarginal line fine and quite straight Hab Khásis, Nágas, E Pegu Exp 26 millim.

4806 Pagyda lustralis, Snell Trans Ent Soc 1890, p. 615

d. Bright orange-yellow; palpi white at base, abdomen with white dorsal spots on first and last segments, and black-and-white dorsal band on penultimate segment. Both wings with outwardly oblique orange antemedial line; an indistinct discocellular line; a postmedial line slightly onlined with silver, straight from costa to vein 2, then retracted to angle of cell and ending on hind wing at anal angle, a marginal orange band with a series of silver specks on it

Hab Sikhim, Khásis, Momeit, Burma. Exp 24 millim

4807. Pagyda exalbalis, n. sp

J. Pale yellow, palpi rufous; head, thorax, and abdomen slightly marked with rufous Fore wing with the costal area tinged with rufous, a straight rufous antemedial line, a dark discocellular line; a diffused band from middle of costa to outer angle, the postmedial line nearly straight from costa to vein 2 then retracted to lower angle of cell; a curved rufous submarginal line with maculate white band beyond it except at apex.

Hind wing with oblique rufous line from costs before middle to near anal angle; a postmedial slightly sinuous line terminating on outer margin at vein 2, a dark rufous line just inside the margin enclosing a somewhat maculate marginal white band, both wings slightly speckled with rufous and with strise on veins of outer area; the clis yellow, with a fine rufous line through them.

Hab Tenasserim (Doherty) Exp. 16 millim Type in coll.

Druce.

4808. Pagyda fulvistriga, Swinh. A. M N H (6) xiv, p 206.

Fulvous yellow, palpi with the tuft on 3rd joint white, abdomen with the terminal segment bright fulvous, with a black band Fore wing with bright fulvous subbasal line, an oblique fulvous antemedial line becoming fuscous towards costs, a discocellular line; a fuscous postmedial line oblique from costs to vein 3, then recurved to angle of cell and straight to inner margin. Hind wing with fuscous line from lower angle of cell to anal angle, with some rufous inside it, a sinuous postmedial line from costs to vein 2; both wings with fine marginal dark line and line through the cilis, which are pale

Hab. Khásis. Exp 28 millim.

SECT. II. (Synclera). Mid tibiæ of male not dilated.

4809. Pagyda traducalis, Zell K Vet-Al. Handl 1852, p 54, Moore,
Lep Ceyl 111, pl 182, fig 9, C & S no 4308
Spilomela retmains, Led Wien ent Mon 1857, p 100
Samea jarbusalis, Wil. Cat xvii, p. 352
Glyphodes univocalis, Wilk Cat xvii, p 499
Zebronia cottalis, Wilk Cat xix, p 984

Head, thorax, and abdomen fulvous yellow with pale markings; the anal tuft often blackish; wings semihyaline white, the mark-Fore wing with two fulvous subbasal lines, the ings fulvous outer expanding into an annulus below costs, an oblique antemedial line followed by a band of conjoined annuli, a medial patch from costa to lower angle of cell with a discocellular yellow line on it, a sinuous line from its inner side to inner margin, and an oblique line from its outer side conjoined at inner margin to the sinuous postmedial line, which is dentate on vein 5, a marginal band broad towards apex and conjoined to the postmedial line on mner margin, with a series of irregular white spots, specks, and strim on it. Hind wing with oblique medial line expanding into a discocellular annulus; a sinuous postmedial line expanding towards anal angle and sending a fork inwards towards lower angle of cell and another outwards to join the irregular marginal band, which encloses a series of irregular white spots and specks; a striga near anal angle

Hab. S. America; S. Africa, Aden, Syria, Palestine, through-

out India, Ceylon, and Burma Earp. 22 millim

4810. Pagyda subtessellalis, Wik Cat xxxiv, p. 1406, C. & S no 4077

Differs from traducalis in being yellow hyaline, fore wing with the conjoined lines forming an irregular postmedial patch on inner margin; the marginal band broader on apical area of each wing, hardly dentate on veins 6, 7 of fore wing, the white spots on marginal band larger in female than in male, hind wing with a fascia on inner area joining the medial line

Hab Sikhim; Karen Hills, Burma, Tenasserim. Exp, & 22,

♀ 28 millim

4811 Pagyda stramınealis, n sp

of Straw-colour, palpi with the 2nd joint black; thorax and abdomen slightly marked with fuscous. Fore wing with the basal half straw-colour, the outer half fuscous, subbasal and antemedial paired black lines with fulvous between them, the latter with its outer line not reaching inner margin but curving round to costa and enclosing a straw-coloured patch, a similar postmedial patch with a spot below its inner edge, a white submarginal line from costa to vein 6 continued as a series of specks curving inwards near inner margin, a series of white specks just inside the margin. Hind wing with straw-coloured basal patch followed by a highly curved irregular antemedial band, then an irregular broad medial straw-coloured band, outer area fuscous, with a fulvous spot beyond lower angle of cell, a submarginal series of white specks, becoming a sinuous line towards anal angle.

Hab Sikhim (Pilcher) Evp 18 millim Type in B. M

Genus ERCTA

Ercta, Will Cat xvii, p 425 (1859) Hydriris, Meyr Trans Ent Soc 1885, p 443 Spanista, Led Wien ent Mon 1863, p 445 (præocc)

Type, E hemialis, Guen, from the W. Indies Range The tropical and warmer temperate zones

Palpi upturned and reaching vertex of head, the 2nd joint broadly scaled in front, the 3rd with short triangular tuft of scales in front; maxillary palpi extremely minute; frons rounded, antennæ long and annulated. tibiæ with the outer spurs about half the length of inner, abdomen of male long, with a trifid anal tuft. Fore wing with the costa arched towards apex, which is produced; the outer margin excurved at middle; veins 3, 4, 5 from close to angle of cell, 7 well separated from 8, 9, to which both 10 and 11 are closely approximated. Hind wing with the outer margin somewhat excurved at middle; veins 3, 4, 5 from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

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SECT. I, Mid tibiæ of male dilated with a fold containing a ridge of hair

4812. Ercta elutalis, Wik Cat xvn, p 448, C. & S no. 4867 (part).
Pyrahs somsalis, Wik Cat xix, p 911
Botys bornealis, Feld Reis Nov pl 185, fig 27
Spanista pretiosalis, Snell. Tyd v Ent xxii, p. 239, & xxvi, p 47, pl. 4, figs 9, 9 a

d. Head and thorax ochreous and rufous, variegated with black and a few purple-grey scales, abdomen reddish brown, with the



Fig 165 - Ercta elutalis, & }

base and anal tuft blackish. Fore wing with the basal area rufous, thickly irrorated with black and with patches of silvery scales; the medial area paler, with a silver patch in cell, two below it, and two on discocellulars; an oblique minutely waved postmedial

black line with silvery outer edge and angled outwards on vein 2; the outer area rufous suffused with black; the costa and margin with pale and silvery markings. Hind wing with the base black, the medial area whitish, with black speck at lower angle of cell and some brown scales beyond it; a postmedial sinuous line with silvery outer edge; the outer area rufous, with blackish suffusion near apex and silvery marks on the margin.

2 with the medial area of fore wing paler, and no silvery marks

below the cell.

Hab. Nilgiris, Ceylon, Borneo; Celebes Exp 24 millim.

SEOT II. Mid tibis of male with no dilation or fold.

4813. Ercta ornatalis, Dun Lép France, viii, pt 2, p 207, pl. 223, fig. 8, C & S no 4367 (part)

Nymphula saturnalis, Treitschka, Schmett Eur x 8. 29

Pyralis deciusalis, Wik Cat xix, p 905.

Cataclysta fraterna, Butl. A M. N. H (4) xvi, p. 415.

Differs from elutals in the medial area of fore wing being usually as dark as the basal and outer area, which are less suffused with black; hind wing with the medial area sparsely clothed with hair and long spatulate scales, the postmedial line of fore wing nearly straight from costa to vein 3, then bent inwards, on hind wing more regularly curved.

Hab. S. Nearctic, Neotropical, and Ethiopian regions; S. Europe; the Oriental and Australian regions. Exp. 20-22

millim.

Genus CNAPHALOCROCIS.

Cnaphalocrocis, Led Wien ent Mon 1863, p 384

Type, C. medinalis, Guen.

Range Japan, the Oriental and Australian regions

Palpi upturned, the 2nd joint broadly scaled in front, the 3rd with short triangular tuft; maxillary palpi filiform, frons flat and oblique, antennæ annulated, tibiæ with the outer spurs half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9; 10, 11 stalked: male with erect triangular tufts of hair on upperside from subcostal and median nervures at middle of cell, with a depression of the wingmembrane between them and a downwardly-directed postmedial tuft from costa Hind wing with the cell short, veins 3, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8 almost to apex.

4814. Cnaphalocrocis medinalis, Guen Delt & Pyr. p 201, C & S. no 4118.

Botys rutilalis, Wik Cat xviii, p 665
Botys iolealis, Wik Cat xviii, p 666
Godara Jolinalis, Led Wien ent Mon 1863, pl 12, fig 7
Botys nurscialis, Wik Cat xviii, p 724
Botys acerrimalis, Wik Cat xxxiv, p 1449

Ochreous, the head and collar fuscous, palpi white below; abdomen ringed with fuscous and white towards extremity, the



Fig 166 Cnaphalocrocis medinalis, &

anal tuft black, striped with white Fore wing with the costal and outer areas broadly fuscous, a slightly curved antemedial line, a discocellular line and straight oblique postmedial line. Hind wing with discocellular speck, an oblique postmedial line bent inwards to anal angle, the outer area fuscous, tapering to anal

angle, a black marginal line and line through the cilia.

In the Australian form nurscialis most specimens have the outer area ochreous between the dark submarginal and marginal lines

Hab Japan, throughout the Oriental and Australian regions. Exp. 20 millim.

Genus MARASMIA.

Marasmia, Led Wien ent Mon 1863, p 385 Dolichosticha, Meyr Trans Ent Soc 1884, p 304 Epimima, Meyr Trans Ent Soc 1886, p 235 Lasiacme, Warr A M N H (6) xviii, p 176

Type, M venilialis, Wlk. Range The tropical zone.

Differs from *Cnaphalocrocis* in vein 10 of fore wing being very closely approximated to 8, 9 instead of stalked with 11; the secondary sexual characters different or absent.

SECT I (Marasma) Fore wing of male with a very large tust of long flattened leaden-coloured scales on upperside from below middle of costa, extending across the cell, and covering a vesicular fold in end of cell

815 Marasmia venilialis, Wth Cat xvii, p 378, C & S no 4119
Botys ruralis, Wth Cat xviii, p 666, C & S no 4108
Botys marisalis, Wth Cat xviii, p 717
Marasmia cicatricosa, Led Wien ent Mon 1863, p 386, pl. 12, fig 8
Lasiacme mimica, Warr A M N H (6) xviii, p 177

Ochreous, palpi black, white below, head and collar mostly fuscous, abdomen tinged with white towards extremity, two black



Fig 167 -Marasmia venilialis, d 1

spots on terminal segment, the anal tuft striped with white Fore wing with the costal and outer areas broadly fuscous, the latter with curved inner edge often expanding on inner area, a curved antemedial dark line, a discocellular black lunule, in male hidden by the tuft of

scales, a series of black specks on medial part of costa, a postmedial line nearly straight from costa to vein 2, where it sometimes touches the expanded part of the marginal fuscous area, then retracted to below angle of cell. Hind wing with oblique line from costa before middle to anal angle, a postmedial line from costa to vein 3; the marginal area fuscous, tapering to anal angle, expanded on vein 2, and nearly touching the postmedial line Both wings with dark line through the ciha, which are white at tips

Hab W and S Africa; throughout India, Ceylon, and Burma; Borneo, Australia, Solomons, Fig. Exp 16-20 millim

4816. Marasmia latimarginalis, Hippen III Het vin, p 138, pl 155, fig 15
Lasiacme pilosa, Warr A M N H (6) xvin, p 176

Differs from bilinealis in the whole fore wing being purplish brown except a pale band beyond the postmedial line from vein 5 to inner margin and extending into its sinus on inner side. Hind wing with the postmedial line nearer the cell, the whole outer third of wing purplish brown, narrowing towards inner margin.

Hab Sikhim, Khásis, Nilgiris Exp 22 millim

SECT II (Epimima). Fore wing of male without the fold and tuft below costs.

A Maxillary palpi filiform, fore wing short

4817. Marasmia trebiusalis, Wik Cat xviii, p 718
Epimima stereogona, Meyr Trans Ent Soc 1886, p 286
Asopia socialis, Wik Cat xxxiv, p 1806

Differs from venilialis in the marginal fuscous area being much

broader, leaving a small ochreous space on fore wing beyond the postmedial line between veins 7 and 3, and a narrow band on hind wing

Hab W Africa; Dharmsála, Ceylon; Borneo, Flores, Fiji

Exp 18 millim

4818 Marasmia bilinealis, Hmpsn III Het viii, p 139, pl 155, fig 25
Dolichostica subauralis, Warr A M N H (6) xviii, p 175

Differs from venitialis in the fore wing having no medial dark costal spots on a pale ground, the marginal dark area of both wings somewhat narrow and of nearly even width throughout Hab Nilgiris; Ceylon; Borneo Eip., of 16, Q 16-22 millim.

B Maxillary palps triangularly dilated with scales, fore wing rather more produced at apex

4819 Marasmia trapezalis, Guen. Delt & Pyr p 200
Botys creonalis, Wlk. Cat. xviii, p 579, Moore, Lep Ceyl. iii, pl 180, fig 10, C & S no 4121
Botys neoclesalis, Wlk. Cat. xviii, p 635
Botys suspicalis, Wlk. Cat. xviii, p 667
Botys convectalis, Wlk. Cat. xxviiv, p 1411
Cnaphalocrocis bifurcalis, Snell. Tyd. v. Ent. xxiii, p 219, & xxvii, p 136, pl 8, fig 5, C & S no 4117
Dolichosticha perinephes, Meyr. Trans. Ent. Soc. 1886, p 236

Pale ochreous suffused with fuscous brown; palpi blackish, white below, anal tuft striped with white. Fore wing with the costal and outer areas most suffused with brown, indistinct oblique subbasal and antemedial lines, two dark specks on discocellulars; a fine oblique postmedial line excurved between veins 6 and 2, and with a diffused curved line beyond it. Hind wing with antemedial and medial oblique lines almost meeting at anal angle, a postmedial line from costa to vein 2, sometimes almost connected with the medial line, the outer area suffused with brown. Both wings with dark marginal line and line through the cilia, which are pale

Hab. Neotropical, Ethiopian, Oriental, and Australian regions.

Exp. 22 millim.

4820. Marasmia fusifascialis, n sp.

d. Differs from trapezalis in the fore wing having a broad subcostal fuscous fascia from base through the cell to the postmedial line, which is straight from costa to vein 2, then much bent inwards, no submarginal line. Hind wing with no antemedial line; the postmedial line bent inwards at vein 2, and almost touching the discocellular speck, no submarginal line.

Hab. Ceylon (Green) Evp 24 millim. Type in B M

Genus RHIMPHALEA.

Rhimphalea, Led. Wien. ent. Mon 1863, p 410

Type, R scelatalis, Led., from Australia.

Range. Oriental region, except peninsular India and Ceylon.

Palpi upturned, the 2nd joint broadly fringed in front, the 3rd short with a small triangular tuft in front, maxillary palpi well developed and filiform, paired tufts of hair behind the eyes, frons flat and oblique; antennæ annulated and somewhat longer than the fore wing; legs long and slender, the outer spurs about half the length of inner, abdomen long, the claspers and anal tuft very largely developed. Fore wing with veins 3, 4, 5 well separated at origin; 7 curved and approximated to 8, 9 for a short distance, 10 also approximated to 8, 9 Hind wing with the cell about half the length of wing, veins 3, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8

4821. Rhimphalea trogusalis, Wik Cat. xviii, p 711
Pinacia ocularis, Feld Reis Nov pl 136, iig 20
Spilomela ommatalis, Snell Tijd v Ent. xxiii, p 235, & xxvii, pl. 4, fig 5
Botys megalopsalis, C & S no 4065 (nec Wik)

Whitish, palpi black, the 3rd joint white, from black at sides; therax striped with black-brown; abdomen with lateral black-brown spots towards base and dorsal bands towards extremity.



Fig 168 —Rhimphalea trogusalis, of }

Fore wing with the costal area fuscous, an ill-defined antemedial diffused his broken up into streaks below the cell, a large purplish-black spot in end of cell with white pupil, veins 2 to 7 streaked with brown to near the postmedial band, which is slightly curved, expands

towards costa, and develops into a patch between vein 2 and inner margin, where it has a spot inside it, an almost marginal band from just below the costa tapering to vein 2. Hind wing with the median neivure at end of cell and discocellulars brown, the veins beyond lower angle slightly streaked with brown, a slightly waved postmedial band, widest towards costa, and slightly excurved between veins 5 and 2; the apex and margin towards anal angle fuscous. Underside of fore wing with pale yellow suffusion round the ocellus.

Hab Dharmsála; Sikhim; Khásis, Andamans, Manilla; Borneo; Celebes. Exp 30 millim

4822. Rhimphalea ochalis, W.L. Cat xviii, p 711.
Spilomela strabonalis, Snell Tijd v Ent xxiii, p 286
Differs from tiogusalis in the whole head, thorax, and abdomen

being fuscous brown; the wings tinged with brown. Fore wing with the antemedial line better defined and expanding into a patch above inner margin, the spot in end of cell brownish, the veins and interspaces beyond the cell all streaked with brown; the marginal band straighter and widest at middle. Hind wing with the veins more strongly streaked with brown. Underside of fore wing with the yellow suffusion round the ocellus deeper and more prominent.

Hab. Khásis, Java. Evp 26 millim.

Genus SYNGAMIA

Syngamia, Guen Delt & Pyr p 187 (1854) Æthaloessa, Led Wien ent Mon 1863, p 435 Bacotoma, Moore, Lep Ceyl 111, p 282 (1885) Orphanostigma, Warr A M N H (6) v1, p 478 (1890)

Type, S. florella, Cram, from the Neotropical region Range The tropical and subtropical zones.

Differs from Bocchoris in the antennæ being annulated with rings at the joints, the frons rounded, palpi more broadly fringed in front

4823 Syngamia abruptalis, Will Cat xvii, p 371, Moore, Lep Ceyl in, pl 178, fig 14, C & S no 4341 Asopia dotatalis, Will Cat xxxiv, p 1305 Asopia suffectalis, Will Cat xxxiv, p 1307

Bright fulvous, frons with lateral white lines, palpi below, pectus, legs, and abdomen below white. Fore wing with curved antemedial fuscous line, a discocellular lunule; the postmedial line very slightly excurved between veins 5 and 2, then retracted to origin of vein 2 and excurved again. Hind wing with oblique antemedial fuscous line, a simuous postmedial line from costa to vein 2. Both wings with black marginal line and line through the cilia, which are grey

Hab W Africa, throughout India, Ceylon, and Burma, Anda-

mans, Java, Australia, Fig. Exp 18 millim.

4824 Syngamia latımargınalıs, Wil. Cat xvii, p 370, Moore, Lep Ceyl iii, pl 178, fig 16, C & S no 1346 Botys jucundalıs, Led Wien ent Mon 1863, p. 463, pl 8, fig 17, C. & S no 4062 Orphanostigma versicolor, Wair A M N H (6) xviii, p 175

Differs from absuptales in the fore legs being banded with black; abdomen ringed with black, the anal tuft with paired white lines and a black line between them. Fore wing varying from orange to pale yellow, the whole outer area of both wings beyond the postmedial line purplish fuscous except a patch in the sinus of the line below vein 2 of fore wing; the antemedial line of hind wing terminating near anal angle, a black spot just above anal angle. Many of the yellow specimens have most of the basal area of both

wings and the medial area of fore wing suffused with purplish fuscous

Hab. W. and E tropical Africa, throughout India, Ceylon, and Burma Enp 20-22 millim.

4825. Syngamia floridalis, Zell K Vet-Al Handl 1852, p 60 Glyphodes calidalis, Guen Dett & Pyr p 294, C & S no 4180. Syngamia octavialis, Will Cat xvii, p 334, C & S no 4237 Syngamia merionealis, Will Cat xvii, p 334 Syngamia tiphalis, Wil. Cat avii, p 335 Hyalea fulvidalis, Wallengi Wien ent Mon 1860, p 174 Botys witalis, Feld Reis Nov pl 135, fig 8

Fiery red and yellow, palpi purplish black above, collar, first and last abdominal segments, and anal tuft purplish black Fore



Fig 169 Syngamia floridalis, 3 }

wing with the base of costa purplish black, a straight antemedial line, the outer half of wing purplish black, with a large postmedial oval yellow patch extending from costs to vein 2 Hind wing with the base fiery red, a black discocellular speck, the area beyond the cell yellow, the outer area purplish black, its inner edge ex-

curved from costa to vein 2, then bent inwards, cula of both

wings white, slightly fuscous at middle

Hab. S Africa, throughout India, Ceylon, and Burma, the Malayan subregion, New Hebrides, Duke of York Island, Tahiti. Exp 18 millim

4826, Syngamia vibiusalis, Wil. Cat xviii, p 634

2. Pale vellow, the palpi fuscous, white below, head and thorax suffused with fuscous, abdomen with black line before the anal tuft, which is tipped with black. Fore wing with slight fuscous suffusion on basal costal area, a curved antemedial line; a discocellular lumule, the postmedial line excurved between veins 5 and 2, then retracted to origin of vein 2 and excurved again, the area beyond it purplish fuscous Hind wing with oblique antemedial line; a sinuous submarginal line with the area beyond it purplish fuscous, cilis whitish, fuscous at base Hab. Congo; Nilgiris, Rangoon Esp 18 millim.

4827 Syngamia falsıdicalis, Wik Cut. xv11, p 370, C & S no 4943.

Fuscous brown; palpi white below, from with lateral white lines; abdomen slightly ringed with white, the anal tuft marked with fulvous, black, and white Fore wing with curved black antemedial line; a discocellular yellow lunule, the postmedial line nearly straight from costs to vein 2, then retracted to origin of vein 2 and excurved again, a large yellow patch on its inner side from below costa to vein 2 and a small spot on its outer side at costa, cilia whitish towards outer angle. Hind wing with oblique sinuous ante- and postmedial lines almost meeting near anal angle, the area between them yellow except towards costa, the cilia whitish towards anal angle.

Hab NW Himalayas, Khásis, Nilgiris, Ceylon Exp. 22

mıllım.

4828 Syngamia abjungalis, Wik Cat. xviii, p 670, Moore, Lep Ceyl iii, pl 160, fig 8, C & S no 4111

Head and thorax purplish fuscous, palpi white below, frons with medial and lateral white lines, abdomen ochreous with the base white, the anal tuft fulvous and black with white stripes, legs white, the fore tibie banded with black. Fore wing fuscous shot with brilliant purple, the costa ochreous, an oblique ochreous area from beyond lower angle of cell to middle of inner margin, a curved antemedial black line, a discocellular band, a line from lower angle of cell ending in a spot on inner margin, an oblique sinuous postmedial line arising from a spot on costa and ending at vein 2, two small dentate ochreous spots beyond it between veins 6 and 8, and one above vein 2. Hind wing ochreous, the base dark, a discocellular line, a line from below lower angle of cell to anal angle, where there is a spot beyond it, a postmedial line from costa to vein 3, the outer area tinged with cupreous brown, the apical area darkest, a dark marginal line and line through the cilia, which are grev at tips

Hab Cevlon Exp 26 millim

4829. Syngamia latifusalis, n. sp.

d. Head and thorax purplish fuscous; palpi white below, abdomen orange, the subterminal segment and base of terminal spotted black and white. Fore wing with the costal and outer areas broadly purplish fuscous, leaving a triangular ochreous patch on medial inner area, a slightly curved black antemedial line, a discocellular lunule, a postmedial line outlined with ochreous, arising from a black spot on costa and slightly retracted at vein 2. Hind wing ochreous with cell-spot, the postmedial line slightly retracted at vein 2, then oblique to anal angle, the area beyond it suffused with fuscous, both wings with pale line at base of cultar.

Hab Tenasserim (Doherty) Exp. 28 millim Type in coll. Druce.

Genus BOCCHORIS.

Bocchoris, Moore, Lep Ceyl m, p 271 (1886) Chabula, Moore, Lep Ceyl m, p 317

Type, B_inspersalis, Zell.

Range The tropical and subtropical zones

Palpi upturned and reaching vertex of head, the 2nd joint

moderately scaled in front, the 3rd with a short triangular tuft; maxillary palpi filiform, frons flat and oblique; antennæ with the shaft smooth; tibiæ with the outer spurs hardly half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle, 7 anastomosing with 8

SECT. I Antennæ of male serrate.

4830. Bocchoris rotundalis, Hmpsn Ill Het ix, p. 169, pl 172, fig 23

Head, thorax, and abdomen marked with brown and white. Fore wing with the basal area brown, with two ill-defined sinuous white lines on it, a large irregular medial white patch enclosing a discoccillular speck, the postmedial area brown, with some irregular white marks on it and a white patch in the curve of the postmedial line, which is followed by an irregular white band, the marginal area brown, with an irregular series of dentate white marks. Hind wing white, with minutely waved oblique medial and postmedial lines, the margin brown, with a minutely dentate white line on it, cilia white, with a series of brown specks on fore wing, a line on hind wing

Hab. Ganjam; Ceylon. Exp 18-22 millim

SECT II Antennæ of male chated

A Neither wing with the outer margin angled at vein 3

4831. Bocchoris danalis, Hmpsh. Ill. Het ix, p 169, pl 172, fig 25

d. Fawn-colour marked with white Fore wing with white basal spot, a large pale diffused antemedial patch, a white spot in end of cell, a postmedial series of streaks between the veins and a series of spots on the margin, the spot between veins 4 and 5 minute Hind wing white, with fawn-coloured marginal line Hab. Ceylon. Evp 20 millim

4832. Bocchoris trivitralis, Swinh A M N H (6) xvi, p 302 Synclera fenestralis, War A M N H (6) xvii, p 105

d Yellowish white marked with dark rufous. Fore wing with some rufous marks on base of costa, two ill-defined dentate subbasal lines, a curved line followed by a straight antemedial line, a large hyaline patch in and below middle of cell, and others beyond discocellulars and lower angle of cell; the medial costal area and spaces between the byaline patches dark rufous, the hyaline patches connected with inner margin by irregular markings; waved postmedial and submarginal lines joining towards inner margin, the apex rufous; cilia pale, fuscous at middle. Hind wing with curved

rufous medial band with yellow spot on it at costa, and joined to outer margin by a fascia on vein 2, two postmedial lines, the outer incurved at vein 6; some submarginal specks, the margin rufous, the cilia pale black at base

Hab Khásis. Exp. 20 millim.

4833 Bocchoris incisalis, Snell Tyd v Ent xxiii, p 215, & xxvi, p 132, pl 8, fig 1

Hydrocampa tenera, Butl P Z S 1883, p 167, C & S no 4432

Head, thorax, and abdomen fuscous brown and white. Fore wing with the basal area white, with slight fuscous markings and three curved antemedial dark lines, the outer line followed by a white band from costa to below median nervure; the outer area fuscous, with a large postmedial trifoliate white mark, with a white mark between it and inner margin and with the postmedial line excurved round it and incurved below it, a white band from costa to vem 6 beyond the postmedial line. Hind wing white, with medial fuscous band enclosing a white discocellular spot; a postmedial line, the outer area fuscous, narrowing to anal angle and usually with a white line on it; a white mark on middle of outer area, and two black specks towards anal angle, cilia of both wings white, with a brown line through them

Hab Tropical America, W Africa; Karáchi; Poona, Ceylon;

Celebes. Exp. 16-18 millim

4834 Bocchoris onychinalis, Guen Delt & Pyr p 205, pl 6, fig 9:

C & S no 4257

Zebroma braurealis, Wilk Cat xix, p. 971, C & S no 4303

Lepyrodes astomalis, Feld Reis Nov pl. 135, fig 22

White; the head, thorax, and abdomen reticulated with black, the anal tuft black. Fore wing with irregular subbasal brown line, two antemedial brown bands, with irregularly waved edges and white middles, a very irregular medial band enclosing two conjoined white annuli, narrowing to inner margin, sending spurs to-



Fig 170 -Bocchoris onychinalis, of

wards the antemedial band and to join the curved postmedial band, which has a white middle and is conjoined from vein 5 to inner margin to the outer brown area, which has submarginal series of white specks and streaks on it Hind wing with

brown medial line enclosing a discocellular speck; an irregularly sinuous postmedial line conjoined from vein 5 to anal angle to the marginal brown band, which has series of white specks and streaks on it, cilia of both wings variegated brown and white.

Hab W Africa, Aden, throughout India, Ceylon, and Burma: Borneo, Australia Erp. 22 millim

4835. Bocchoris acamasalis, Will Cat. xix, p 970, C & S no. 4328
Zebronia perspicualis, Walk Cat xxxiv, p. 1347
Botys flexissimalis, Wilk Cat xxxiv, p 1426
Heterocnephes strangulalis, Snell Tyd. v Ent xxiii, p 224, & xxvii, pl 3, fig 1.

Fuscous with a purplish tinge and white markings, palpi white banded with black. Fore wing with the basal area white, an oblique subbasal black line, followed by a fuscous band, an oblique antemedial black line, a black-edged fuscous medial band with a pale concentric mark above inner margin, a black-edged pale reinform postmedial patch extending from costa to vein 2, followed by a somewhat sinuous white line expanding into a spot at costa. Hind wing pale at base, with oblique black line from base of costa to near anal angle, and sometimes interrupted, a discocellular black band often continued along vein 2 and conjoined to the dark outer area, both wings usually with pale patch on outer area towards inner margin, a black marginal line and line through the cilis

Hab Throughout India, Ceylon, and Burma, Java, Celebes.

Exp 24-26 millim.

4836. Bocchoris telphusalis, Wth. Cat xix, p 974
Heterocnephes remiferalis, Snell Trans Ent Soc 1890, p 616

Differs from acamasalis in the patch before the postmedial line of fore wing being more distinctly reniform and not reaching the costa. Hind wing with the postmedial line conjoined to the discocellular mark at lower angle of cell; the pale patches beyond the postmedial line towards inner margin of fore wing and on middle of inner area of hind wing almost obsolete

Hab Sikhim, Khásis; Margharita, Assam, Tenasserim; Borneo.

Evp. 22 millim.

4837. Boochoris sphenocosma, Meyr Trans Ent. Sec 1894, p 456 Chabula vedrualis, Sunh A M N. H (6) xiv, p. 197

Differs from acamusals in being more purple. Fore wing with the black-edged white antemedial band narrower, the black-edged white postmedial patch on costa triangular, a pale line outhining the black edge of the antemedial band, then curving round and running inside the postmedial patch. Hind wing with the whole basal area fuscous, leaving triangular white marks from costa across the cell and beyond it, the postmedial line of both wings narrow and obsolescent, without pale patches beyond it.

Hab Khásis, Borneo, Pulo Laut Exp. 22 millim

4838. Bocchoris inspersalis, Zell K Vet-Ak Handl 1852, p 83, C & S no 4278

Desmis afflictalis, Guen Delt & Pyr p 190, pl 5, fig 4

Ædiodes bootsnalis, Wik Cat xxxiv, p 1298

Black; palps white below, from with lateral white lines, a tuft of pale yellow hair behind each eye, metathorax with a white

band, abdomen ringed with white Fore wing with white spot below middle of cell, a large white spot in end of cell extending below it, a speck below vein 2, a postmedial speck on costa and spot below it extending from the subcostals to vein 5, a submarginal white speck on vein 5, the cilia white at apex and outer angle Hindwing with white patch on basal area, a white band from lower angle of cell to near anal angle, a large spot beyond the cell, a submarginal speck on vein 4, the cilia white at apex and anal angle.

Hab Throughout Africa, Aden; Japan, China; Bhután;

Nilgiris, Ceylon, Burma, Java Eap. 20 millim

4839 Bocchoris ciliata, Swinh A. M N H (6) xiv, p. 206

Q Differs from inspersalis in the palpi being white at end of 2nd and 3rd joints only, abdomen with white bands on 2nd and subterminal segments. Fore wing with large medial white spot extending from just below costs to vein 1, and discal patch from subcostals to vein 2; cilia white below apex and at outer angle. Hind wing with large antemedial white patch from cell to inner margin and discal patch between veins 6 and 2

Hab Khásis Exp. 18 millim

4840. Bocchoris trimaculalis, Snell Tyd v Ent xxiii, p 232

Differs from ciliata in the hind wing being without the discal white patch

Hab. Khásis, Rangoon; Celebes Exp. 18 millim

- 4841 Bocchoris artificalis, Led Wien ent Mon 1863, p 463, pl 8, fig 16
 Ædiodes inscitalis, Wlk Cat xxxiv, p 1297, C & S no 4247
 Ædiodes abstrusalis, Moore, Lep Atk p 207, C & S no 4239
- d. Fuscous brown with a slight purplish tinge; palpi white below; abdomen with the first segment white, the others tinged with white. Fore wing with dark-edged hyaline spot in cell, with a sinuous hyaline line from it to inner margin traversed by the antemedial line, a hyaline spot in end of cell and another below origin of vein 2, the postmedial line with a trifid hyaline mark beyond it from costa to vein 5 and a slight lunule inside it, highly bent outwards between veins 5 and 2, and with hyaline specks beyond it, then retracted to origin of vein 2 and running with hyaline specks beyond it to inner margin Hind wing with the basal half hysline white; a sinuous medial line with diffused fuscous on its inner edge, the postmedial line bent outwards between veins 5 and 2, with conjoined hyaline white spots beyond it from veins 7 to 2; the outer area purplish fuscous Both wings with an obscure marginal series of dark specks, the cilia chequered fuscous and white.
- 2 with no white band at base of abdomen, the hyaline markings of fore wing smaller

In the form abstrusalis the hyaline markings are wholly suffused with fuscous and hardly traceable.

Hab. Dharmsála, Calcutta. Exp 22 millim.

4842 Bocchoris clathralis, Swinh A M N H (6) xiv, p 200

6. Pale ochreous irrorated with fuscous, antennæ ringed with black; abdomen with the third segment black above and with lateral specks towards extremity. Fore wing with traces of curved subbasal line and of sinuous antemedial line oblique from costs to median nervure, a large discocellular liquide filled in with grey; a postmedial annulate line retracted along vein 2 to below end of cell, the area beyond it, except costal area, black shot with purple, leaving a series of pale lumiles beyond the postmedial line; cilia fuscous in places and with a series of blackish spots. Hind wing with dark-edged discocellular lumile, traces of a postmedial maculate sinuous line retracted along vein 2 to below angle of cell, an obscure sinuous submarginal line, the apical area purplish fuscous; a series of dark specks on the cilis.

Hab. Khásis, Tenasserim. Exp. 26 millim.

4843. Bocchoris adipalis, Led. Wien ent. Mon. 1868, p 475, pl 11, fig. 16
Samea cuprinalis, Moore, P Z S. 1877, p 615, C. & S no 4243
Mimorista marginalis, Warr A M N. H. (6) xviii, p. 114

Yellowish white or ochreous, the head and thorax suffused with brown. Fore wing with the costal area brown; an almost straight antemedial line, sometimes with brown suffusion beyond it, an annulus in cell and larger discocellular annulus, both conjoined to the brown costal area; a dark spot below middle of cell, sometimes developed into a claviform mark, the postmedial sinuous line bent outwards between veins 5 and 2, then retracted to the cell, and with ochreous patches beyond it towards costa and inner margin and specks beyond the excurved portion, the outer area brown. Hind wing with discocellular annulus, a postmedial minutely waved line bent outwards between veins 5 and 2, followed by an ochreous band before the marginal brown area.

Hab Sikhim, Khásis; Ceylon; Mergui; Andamans, Malacca,

Amboina. Exp 24-26 milhm.

4844. Boochoris aptalis, Wil. Cat xxxiv, p. 1425 Samea usitata, Butl. Ill. Het ui, p. 74, pl 59, fig. 8.

Differs from adapates in being yellower, the spot in cell of fore wing and discocellular spots of each wing filled in with brown; the marginal brown area more extensive and only leaving small ochreous spots towards costs and inner margin of each wing, and on fore wing conjoined by a streak across the postmedial line to the discocellular mark

Hab. Japan, Khasis, Mvsol. Eap. 24 millim.

- B Both wings with the apex somewhat produced, the outer margin excised to vern 3, where it is angled.
- 4845. Bocchoris invertalis, Snell Tyd v Ent xx, p 78, pl 6, fig 4
- ochreous, a black speck below middle of cell, a large hyaline jellow patch, quadrate in end of cell, irregular below it, and continued as an oblique line from vein 1 to inner margin, a black-edged discocellular lunule filled in with rufous, a large hyaline yellow patch on costa before apex continued between veins 5 and 2 as a sinuous line. Hind wing with indistinct hyaline yellow ante-and postmedial lines, the latter bent outwards and minutely dentate between veins 5 and 2, then retracted and developed into a patch below end of cell and continued as a sinuous line to anal angle

Hab Tenasserim Valley, Sumatra; Borneo Erp. 30 millim.

Genus ULOPEZA

Ulopeza, Zell K Vet -Al. Handl 1852, p 58 Pseudanalthes, Warr A M N H (6) v1, p 477 (1890)

Type, U conigeralis, Zell., from Africa

Range Africa, N E and S India, Ceylon, Malayan subregion; Celebes

Palpi upturned, the 2nd joint reaching vertex of head and slightly fringed in front, the 3rd well developed and acuminate, with a short triangular tuft in front, maxillary palpi filhform; frons rounded, antennæ of male cliated, the basal joint dilated and toothed, the shaft excised, then clothed with rough black scales for a short distance, tibiæ with the outer spurs half the length of inner; mid tibiæ clothed with spinous hair. Fore wing with the apex somewhat produced and the outer margin oblique, veins 3, 4, 5 from angle of cell, 7 approximated to 8, 9 for a short distance, 10 also approximated to 8, 9 Hind wing with veins 3, 4, 5 from angle of cell, which is rather short, 6, 7 from upper angle or shortly stalked, 7 anastomosing slightly with 8

The male of the typical species has the fore cove and femora the hind tibie and spurs fringed with han, thorax with ridges of large

scales below

SECT II. (Pseudanalthes) Male with the thorax and legs normal

- 4846 Ulopeza idyalis, Wil. Cat xix, p 996, Moore, Lep Ceyl iii, pl 183, fig 5, C & S no 4116
 Botys disjunctalis, Wil. Cat, xxxiv, p 1408, C & S no 4115
- of abdomen whitish Fore wing with a large pale yellow patch, with the discocellular brown lumile on it extending from middle

of costs to median nervule and beyond the cell down to vein 2,



Fig 171 — Ulopeza idyalis, d }

the veins crossing it orange, an apical costal orange streak with two small, usually conjoined yellow spots below it before the apex, traces of antemedial and medial dark lines. Hind wing with the costal area usually pale,

traces of a postmedial line beyond lower angle of cell

2 pale yellow Fore wing with the veins orange, a fulvous streak on base of costa, a sinuous antemedial fulvous line, a speck in cell and discocellular lumile, the postmedial line minutely waved, nearly straight from costa to vein 2, then retracted to lower angle of cell, some fulvous on medial outer area. Hind wing with the postmedial line represented by a curved portion beyond lower angle of cell and a spot on origin of vein 2, both wings with the margin and cilia brown

Hab Sikhim, Khásis, Nágas, Bombay; Nilgiris, Ceylon;

Pulo Laut, Celebes Exp 26 millim.

4847. Ulopeza semivialis, Moore, Lep Atk p 209, pl. 7, fig 6, C & S no 4800

d. Fuscous brown with a purplish tinge; from ochreous, palpi below and pectus white Fore wing with ochreous postmedial patch from costs to vein 5, yellower at costs and its outer edge somewhat tridentate, abdomen whitish below.

2. Fore wing with the postmedial patch large, lumulate, and

extending from costs to vein 3

Hab Sikhim Exp, 326, 240 millim

Genus NOSOPHORA.

Nosophora, Led Wien ent Mon 1863, p 407 Analtes, Led Wien ent Mon 1863, p 407 Eidama, Will Cat xxxiv, p 1874 (1865)

Type, N dispilates, Hmpsn =chironales, Led (nec Wlk.), from Borneo and Amboina

Range NE India, Ceylon, Burma, Malayan subregion to, New Guinea

Palpi upturned, the 2nd and 3rd joints recurved over vertex of head, the 1st and 2nd joints in female slightly fringed with hair in front, the 3rd with a small triangular tuft in front, in male the 2nd joint is fringed with long coarse hair curled upwards and inwards, maxillary palpi filiform, frons rounded, antennæ of male with long ciha, the basal joint dilated with scales, the vertex of head hollowed out in male, the patigia with tufts of long hair extending beyond the metathorax; thorax below with ridges of large curved scales near the coxæ, a tuft of long hair from origin of fore wing, tibiæ with the outer spurs half the length of

inner, mid tibiæ clothed with spinous hair. Fore wing with veins 3, 4, 5 from angle of cell, 7 approximated to 8, 9 for one-third length, 10 also approximated to 8, 9. Hind wing with veins 3, 4, 5 usually from angle of cell, 6, 7 usually from upper angle, 7 slightly anastomosing with 8

- SECT I. Hind wing of male with a ridge of hair on underside below subcostal nervure from near base to beyond the cell, veins 4 and 5 given off at a point well above lower angle, 6, 7 stalked
 - A Male with the whole hind tibia, the inner terminal spur, and the tarsal joints fringed with long hair.
- 4848. Nosophora chironalis, Will. Cat xviii, p 683 Nagia incomitata, Swinh. A M N H (6) xiv, p 205.

Black-brown, underside of palpi, thorax, and abdomen whitish. Fore wing with hyaline white discocellular lunule expanding into a patch beyond lower angle of cell and forming a comet-shaped mark. Hind wing with hyaline white nearly round spot beyond lower angle of cell.

Hab. Khásis, Borneo. Exp., & 34, 2 30 millim.

- B Male with the hind tibia, the inner spui, and the first two tarsal younts fringed with hair.
- 4849. Nosophora conjunctalis, Wlh Cat xxxiv, p 1483 Nosophora ochnodes, Meyr. Pr Linn Soc N S W 1886, p 255

Fuscous, pectus and legs whitish, fore tibize banded with fuscous. Fore wing with more or less distinct pale speck in end of cell, a large white reniform mark beyond the cell from subcostals to vein 2, with slight fulvous streak above it below the costa.

Hab Nágas, Tenasserim; Borneo; Amboina, Flores, Australia. Evp 25 millim.

- C. Male with slight tufts of han at end of hind tibia only
- 4850. Nosophora triguttalis, Warr A M. N H. (6) xviii, p 173
- 3. Black with very slight purple tinge, frons, vertex of head, patagia, and base of abdomen marked with white, tarsi and abdomen below whitish. Fore wing with white spots near base and in cell, a large white spot beyond cell from subcostals to vein 2, expanding below vein 4. Hind wing with large round white spot beyond cell

Hab Khásis, Tenasserim. Evp. 26 millim,

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4851. Nosophora parvipunctalis, n sp

d. Black-brown; pectus and abdomen below white, fore wing with small white spot beyond discocellulars; hind wing with indistinct pale spot beyond lower angle of cell. (Hind legs wanting)

Hab Tenasserim (Doherty). Exp 28 millim Type in cell Druce

SECT. II Hind wing of male with no ridge of hair below the subcostals, veins 4, 5 and 6, 7 from angles of cell

A. Hind tibue of male fringed towards extremity with long hair, the inner terminal spur and first tarsal joint also fringed with hair.

4852. Nosophora obliqualis, Hmpsn Ill Het 1x, p 170, pl 173, fig. 5

d Rufous brown, palpi fuscous, abdomen below and legs whitish. Fore wing with a fuscous fascia along base of costa, thence running above the small hyaline spot in end of cell and below the yellow triangular spot which extends from the costa into the end of cell and is conjoined at costa to the large blackedged yellow triangular postmedial patch extending down to vein 2, the apical area yellow, a marginal series of black specks. Hind wing suffused with fuscous brown; the costal area pale, traces of an oblique line from costa to vein 2, more distinct and waved on the greyish underside

Hab Ceylon. Exp. 24 millim

- B. (Analtes) Male with the hind tibio, the inner terminal spur, and the tarsus naked
- a Fore wing of male with no trifts of hair at middle and end of cell below.

4853. Nosophora althealis, Wil. Cat. xvni, p 697
Analtes congenitalis, Wil. Cat xxxiv, p 1488
Nosophora quadrisignata, Moore, Lep Ceyl 111, p 320, pl. 183, fig 6, C & S no 4128

Ochreous and fulvous, palpi fuscous, white below, abdomen



Fig 172 -Nosophora altheates, of

with the basal segment white, the terminal segments dark rufous. Fore wing ochreous; the costal area to end of cell and the outer area suffused with fuscous, a small dark spot with a hyaline spot beyond it in end of cell, an indistinct dark line from

lower angle of cell to inner margin; a large dark-edged silverywhite patch with indented outer edge from subcostals to vein 2. Hind wing suffused with fuscous, the base pale, a large round dark-edged silvery-white spot beyond the cell with some fulvous beyond it.

Hab. Sikhim; Ceylon; Andamans; Borneo, Pulo Laut, Sula,

Mysol, Amboma; New Guinea. Exp. 30 millim.

4854 Nosophora semitritalis, Led Wien ent. Mon. 1863, p 407, pl 14, fig 14

Differs from althealis in the fore wing having a well-defined obliquely sinuous antemedial line, the medial line below cell waved, no fuscous on costa or spot in cell; the postmedial patch expanding towards costa, both its inner and outer edges indented, its lower part small and angled inwards. Hind wing with the spot beyond the cell subquadrate and conjoined to a large white costal patch

Hab Sikhim, Pulo Laut, Amboina Evp. 30 millim

- b Fore wing of male with tufts of rough hair in middle and end of cell below.
- 4855. Nosophora albiguttalis, Swinh Trans Ent. Soc 1890, p. 273, pl viii, fig 14
- d Black; abdomen below white Fore wing with a large silvery-white lumile beyond the cell, extending from vein 7 to 2

 Hab Rangoon. Exp. 30 millim
- 4856 Nosophora scotaula, Meyr Trans Ent Soc 1894, p 459
- d Uniform black-brown with a slight cupreous tinge, pectus and abdomen below whitish

Hab Tenasserim, Singapore, Pulo Laut Exp. 30 millim.

Genus CHALCIDOPTERA

Chalcidoptera, Butl A M N H (5) xx, p. 119 (1887) Euthalantha, Snell Tyd v Ent. xxxviii, p 144 (1895) Gnamptorhiza, Warr A M N H (6) xvii, p 135 (1896).

Type, C crimpes, Feld

Range. N.W Himalayas, Assam; Ceylon; Burma; Borneo; Amboina; Solomons

Palpi upturned, the 2nd joint reaching vertex of head and slightly fringed in front, the 3rd well developed with a small triangular tuft in front; maxillary palpi small and filiform; frons rounded, antennæ of male ciliated. Fore wing with veins 3, 4, 5 well separated at origin, 7 straight and well separated from 8, 9, to which 10 is approximated. Hind wing with the cell about half the length of wing, 3 from angle; 4, 5 somewhat approximated for a short distance, 6, 7 from upper angle, 7 anastomosing strongly with 8.

- SECT I Antennæ of male with the shaft knotted at one-third from base, then excised, gradually thickened and clothed on upper side with rough scales; abdomen with a large bilobed corneous valve on underside from base covering the spiracles.
- 4857 Chalcidoptera straminalis, Guen Delt. & Pyr. p 200, C. & S. no 4302
 - Synclera nemoralia, Swinh P. Z S 1889, p 421, pl 44, fig 6 3. Yellowish white slightly irrorated with ferruginous; abdomen

banded with ferruginous. Fore wing with a ferruginous spot at base of costa; a subbasal ferruginous line with a spot beyond it on inner margin; a broad curved antemedial line, a fine discocellular lunule, the postmedial line broad, outwardly oblique from costa to vein 2, where it touches a patch on outer margin, then retracted to lower angle of cell and connected with the antemedial line by a streak on vein 1; a marginal line slightly broadest at apex. Hind wing with discocellular lunule; a postmedial line angled inwards on vein 5, touching a patch on outer margin at vein 2, then retracted to lower angle of cell and running obliquely to near anal angle, a marginal line

Hab. Simla Exp. 24 millim

- SECT. II Antenne of male with the base of shaft thickened and slightly excised; the outer margin of both wings excurved at middle, hind wing with a small lobe on inner margin near anal angle
- 4858. Chalcidoptera atrilobalis, n sp.
- of. Fuscous grey-brown, abdomen tunged with rufous towards extremity, which has a pair of dorsal black specks on anal segment, fore tibes with dark band. Fore wing with inwardly oblique fuscous antemedial line, the medial area rather greyer towards costs, a discocellular black lumile, the postmedial line highly excurved from below costs to vein 2, where it is retracted to below angle of cell; the cha pure white except at apex and middle Hind wing with discocellular dark spot, the postmedial line excurved from below costs to vein 2, then retracted to lower angle of cell; the lobe on inner margin black, the cilis with a fine dark line through them

Hab. Tenasserim (Doherty). Exp. 24 millim Type in coll.

Druce.

- SECT. III. (Gnamptorhiza). Antennæ of male with a small toothon outer side of basal joint at extremity, the base of shaft thickened with scales and curved.
- 4859. Chalcidoptera rufilmealis, Swinh A M N H (6) xvi, p 303. Gnamptorhiza multiplicalis, Warr A M N. H. (6) xvii, p 185

Head, thorax, and abdomen purplish red, palpi below and vertex of head white; wings yellowish white. Fore wing with the base and costal area red, an outwardly oblique red antemedial line angled on vein 1, where it is joined by the angle of an inwardly oblique line from lower angle of cell, a spot in cell and discocellular band; a line from lower angle of cell to outer angle joined by an irregularly sinuous postmedial line, the base of veins 3, 4 and the veins at margin streaked with red, a short apical band and a marginal line, chia fuscous in parts. Hind wing with large purple-red lumile at lower angle of cell, a pale red

patch above anal angle, a sinuous postmedial line on yellow ground between veins 6 and 2, the veins at margin streaked with red, a marginal red band and the cilia blackish from apex to vein 2. Hab Khásis Erp 30 millim.

SECT IV (Chalcidoptera) Antennæ of male normal; patagis extending beyond metathorax

A Mid and hind tibia fringed with immensely long hair on outer side, the inner spurs very long, hind tarsi with the first two joints fringed with long hair on both sides, hind wing with the costa slightly excised beyond middle, the apex much produced and falcate, rough hair on end of vern 1 c below

4860 Chalcidoptera emissalis, Wilk Cat xxxiv, p 1421. Chalcidoptera rubra, Butl A M N H (5) xx, p 120. Analthes crimpes, Feld Reis. Not pl 134, fig 43 Analthes pyrrhocosma, Meyr Trans Ent Soc 1894, p 460

d. Bright ferruginous red, head variegated with ochreous, abdomen with some fuscous at sides



Fig 173 - Chalcidoptera emissalis, d

Fore wing with yellow spot in end of cell and small spot below the end, a large rentform patch beyond the cell from below costs to vein 2. with two small spots beyond it below costa, an apical patch and marginal spot at vein 2. Hind

wing with large pale yellow subquadrate spot beyond lower angle of cell, with two small submarginal spots beyond it Underside pale, with the markings in cell of fore wing defined by fuscous; a V-shaped postmedial black mark below costa, a spot on costa before apex, and large patch at middle of outer area, hind wing with broad diffused oblique antemedial black band and the apical area black.

2 with the basal half of fore wing yellow, with ill-defined antemedial and medial waved 13d lines, the lower part of the postmedial reniform mark broken up into spots; hind wing with the base yellow, the apical area blackish, underside with the black confined to the markings of outer area

Another female has the ferruginous markings much reduced; the ante- and postmedial lines being narrow, with broad areas of the yellow ground-colour beyond the latter, leaving small varches of ferruginous on the margin chiefly on apical area

Hab Nágas, Margharita, Assam, Ceylon, Tenasserim, Singapore, SE Borneo, Amboina, Aru; Solomons Exp., & 26, 922

millim

- B. Med and hind legs smoothly scaled, hind wing normal.
- 4861. Chalcidoptera appensalis, Snell Tijd v Ent 1884, p 41, pl 8,-fig. 12.
- d. Greyish fuscous, palpi with the base and 3rd joint white; from whitish; abdomen with white dorsal bands. Fore wing with some whitish on base of costa and a black subbasal spot; an antemedial black costal spot with slightly curved line outlined with whitish from it to inner margin; a speck in cell; a large post-medial black-outlined white lumile from costa to lower angle of cell, with incurved line from it to inner margin. Hind wing with fuscous discocellular line; a postmedial line bent outwards between veins, 5 and 2 and ending near anal angle. Both wings with marginal dark line and line through the cilia, which are pale at tips. Underside pale.

Hab. Khásis; Nágas; Ceylon; Rangoon; Java Esp. 22 millim.

Genus CAPRINIA.

Oaprinia, Wik Cat. xviii, p. 543 (1859) Cydalima, Led. Wien. ent Mon 1868, p. 397.

Type, O. persusalis, Wik., from Venezuela.

Range. Venezuela; throughout the Oriental region, Australia. Differs from Glyphodes in the palpi being very broadly and conically scaled, and hardly reaching vertex of head, the 3rd joint upturned.

- SECT. I. (Caprinia). Antenne of male normal, fore wing with the apex rectangular, the outer margin erect
- 4862. Caprinia felderi, Led Wien ent Mon. 1863, p 401, pl 13, fig 18 Caprinia intermedia, Warr A. M N H (6) xvii, p. 100.
- of. Head fuscous black; thorax and abdomen white, the latter with the extremity and anal tuft black. Fore wing pure white, the costal half fuscous black, with projections in cell and on discocellulars, the outer fourth of wing fuscous black, a series of three postmedial white specks from below costa to vein 5. Hind wing pure white, with a discocellular speck and the apical area black.

Hab. Khásis, Nágas; Java; Amboina. Ecp 24-26 millim.

- SECT. II. Antennæ of male with the base of shaft excised, fore wing with costal fold enclosing an expansile tuft of long hair
- 4863. Caprinia diaphanalis, Wik Cat. xxxiv, p. 1365.

 Botys margaromalis, Wik Cat xxxiv, p. 1442

 Margaroma plumifera, Butl A M N H (5) x, p. 236.
- d. White, the tip of palpi, from, base of collar, and shoulders fuscous, legs fuscous above, the tarsi ringed with white. Fore wing with fuscous streaks along basal two-thirds of costs and

subcostal nervure, the other veins slightly tinged with fuscous; a discocellular black lumile and a marginal series of black specks. Hind wing hyaline white, with marginal series of black specks from apex to vein 2.

Hab. Tenasserim, Java; Solomons, New Britain; Australia.

Exp. 32 millim.

SECT. III (Cydalima). Antennæ of male with the basal joint dilated, the basal part of shaft thickened with scales and contorted, fore wing with the apex produced, the outer margin oblique

4864. Caprinia conchylalis, Guen. Delt & Pyr p 303, pl 8, fig 9; C & S. no 4200

Pure white; head black-brown, the palpi with a metallic tinge,

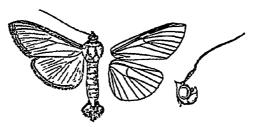


Fig 174 - Caprinia conchylalis, 6

collar, fore and mid legs tinged with cupreous brown, anal tuft of male black. Fore wing with broad costal cupreous-brown band; both wings with series of silvery striæ close to the margin, which is silvery white

Hab Sikhim; Assam, Bombay; Nilgiris, Ceylon; Burma.

Exp. 40-46 millim

Genus MACARETÆRA

Macaretæra, Meyr Trans Ent Soc 1886, p 255 Trichoptychodes, Swinh A M N H (6) xiv, p 207 (1894)

Type, M hesperis, Meyr.

Range. Khasis, Fiji.

Palpi upturned and reaching vertex of head, the 2nd and 3rd joints conically scaled and flattened; maxillary palpi filhform; from flat and oblique, antennæ annulated, tibiæ slightly fringed with hair on outer side, the outer spurs about half the length of inner. Fore wing with vein 3 from before angle of cell, 4, 5 from angle, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the median nervure pectinated above, vein 1a in male with a thick ridge of scales above, the cell about half the length of wing; vein 3 from angle, in male with a small tuft of scales below near the margin, veins 3, 4 stalked, in male 4 almost obsolete, 6, 7 from upper angle, 7 anastomosing with 8

296 PYRALIDÆ.

4865. Macaretæra hesperis, Meyr Trans Ent Soc 1886, p 255 Trichoptychodes delicata, Swinh A M N H (6) xiv, p 207

d Head, thorax, and abdomen brownish, the last ringed with white, palpi white, fore legs banded yellow and white. Fore



Fig 175 Macarciæra hesperis, &

wing white, with yellow spot at base of costa, a broad oblique subbasal yellow band with waved outer edge, an oblique yellow antemedial band from costs to median nervure, three oblique bands just beyond the middle, their extremities attenuated. fuscous, and conjoined on vein 3, where they are merged in a

diffused dark patch on inner margin crossed by a waved white line, the outer area yellow, with a waved oblique white streak trom apex and another from outer margin below apex to vein 2 Hind wing white, with a broad fuscous-black marginal band diffused along the median nervules to cell, the margin white at apex, the ridge of scales on vein 1a brown and black

I with the markings of thorax and abdomen yellower, fore wing with the dark postmedial patch on inner area browner and broken up into streaks on veins 2 and 3 and spots on inner margin, hind wing with hardly a trace of fuscous on outer area

Hab. Khásis, Fiji. Exp, & 18, 9 20 millim

Genus FILODES

Fuodes, Guen Delt & Pyr p 317 (1854) Pinacia, Hubn Samml exot Schmett 1V, 4, p 15 (1832), non descr Auxomitia, Led Wien ent Mon 1863, p 391

Type, F fulvidorsalis, Hubn

Range Ethiopian and Oriental regions

Palpi upturned and hardly reaching vertex of head, the 2nd and 3rd joints conically scaled; maxillary palpi filitorm, frons with a rounded prominence, antennæ nearly one and a half times the length of fore wing and minutely annulated, fore tarsi of male with the first three joints tringed with hair on mner side, hind tibiæ with the outer medial spur absent, the tarsi very long; abdomen long, with lateral tufts on terminal segments; anal tuft of male thick, of female slender Fore wing with the costs highly arched towards apex, veins 3, 4, 5 from angle of cell, 7 curved and approximated to 8, 9, to which 10 also is closely approximated. Hind wing with the cell short, veins 3, 4, 5 radiating from the angle, 6, 7 on a long stalk, 7 anastomosing or in male becoming coincident with 8.

FILODES. 297

4866 Filodes fulvidorsalis, Hubn Samml exot Schmett 1v, 4, p 15, figs 643, 644, Moore, Lep Ceyl 111, pl 182, figs 2, 2 a (larva), C & S no 4220

Auxomitia mirificalis, Led Wien ent Mon 1863, p 391, pl 13, fig 1, C & S no 4221

Filodes patruelis, Moore, Lep Ath p 218, C & S no 4224

Head black, the palpi steel-blue, vertex of head, thorax, and abdomen orange-scarlet, pectus yellow, tarsi pale, abdomen with

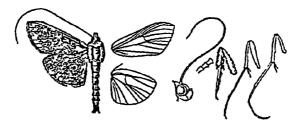


Fig. 176 -Filodes fulvidorsalis, of

a dorsal series of black spots and steel-blue segmental rings, the lateral and anal tufts steel-blue and black, wings black-brown, greyish towards outer margin and sometimes with traces of an oblique postmedial line, which may be prominent on underside Fore wing with an orange basal patch, a steel-blue fascia below basal half of costa, a black spot at origin of vein 2, usually with a spot above it in the cell, a spot at middle of cell and larger discocellular spot. Underside of fore wing with steel-blue subcostal fascia, hind wing with discocellular black lunule

The Sikhim form is large, the variety mirificalis patrielis has the orange of the thorax and abdomen more or less suffused with fuscous. Fore wing with the basal orange patch obscure and diffused, the postmedial line somewhat prominent on upperside of both wings, a Khási specimen has the ground-colour dull ferruginous.

Larva olive-green, with a subdorsal whitish fascia, each somite with several black warty spots, head yellowish, legs black. Food-plant Thunbergia allata Pupa red, with long sheaths for antennæ and proboscis, the former serrated

Hab. Réunion; throughout India, Ceylon, and Burma; Andamans, Nicobars, Philippines, Borneo; Java, Sumbawa Evp. 30-44 millim.

4867. Filodes sexpunctalis, Snell Trans Ent. Soc 1890, p 603, pl xx, figs 6, 6 a

Differs from fulvidorsalis in the colour of the thorax, abdomen, and base of fore wing being much deeper orange-red; fore wing without the black spots at middle of cell and on discocellulars; underside without black spots

Hab. Sikhim Evp. 46 millim.

Genus TYSPANODES.

Tyspanodes, War A M N. H (6) vii, p 425 (1891) Peribona, Snell Tijd v Ent xxxviii, p 145 (1895). Radiorista, Warr A M N H (6) xvii, p 188 (1896)

Type, T nigrolinealis, Moore.

Range N W & E. Himlayas, Khásis, Ceylon, Andamans; Java.

Palpi upturned and hardly reaching vertex of head, 2nd and 3rd joints conically scaled, maxillary palpi filiform, from flat and oblique, antennæ almost simple. Fore wing with veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, to which 10 is approximated. Hind wing with vein 3 from angle of cell, 4, 5 closely approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I. (Tyspanodes) Antennæ of male without sinus and corneous teeth at base of shaft.

4868. Tyspanodes linealis, Moore, P. Z. S 1867, p 665, pl. 33, fig. 17; C. & S no 4727.

Straw-colour; thorax and abdomen with an orange tinge, the latter suffused with fuscous towards extremity. Fore wing with the interspaces striped with fine black lines, the cell and internomedian interspace each having two lines, a fine marginal black line. Hind wing and underside more or less suffused with fuscous. Hab Dharmsála, Sikhim; Ceylon, Andamans. Exp. 28 millim.

- 4869. Tyspanodes flaviventer, Warr A M N H. (6) vu, p 425
- d. Head yellow, thorax grey, abdomen orange, with the anal tuft black Fore wing grey, with a black spot at base, two antenedial series of three black spots; a quadrate spot in end of cell, the interspaces striped with black beyond the cell. Hind wing orange, the costal and apical areas black Underside of fore wing fuscous, with some grey suffusion on disk.

Hab Sikhim. Earp. 32 millim.

- 4870. Tyspanodes nigiolinealis, Moore, P Z S 1867, p 95, C & Sno 4222
- d. Head, thorax, and fore wing orange, the last with black spot at base and two in end of cell; black streaks in all the interspaces, abdomen and hind wing black. Underside of fore wing orange, the apical area fuscous

Hab. Sikhim. Exp. 34 millim.

- 4871. Tyspanodes fascialis, Moore, P. Z S. 1867, p 665, C & S. no 4726.
 - d. Head and thorax fiery red; palpi at base and abdomen black.

Fore wing fiery red, a basal black mark, veins 1 to 7 and the



Fig 177 - Tyspanodes fascialis, &

interspaces below and beyond the cell streaked with black; a large black patch on middle of outer area. Hind wing black Hab. Sikhim; Khásis. Exp 28 millim.

4872 Tyspanodes cardinalis, n sp

Q. Head black, thorax crimson; abdomen black; legs black, the tarsi banded with white. Fore wing crimson, the costa orange, a black streak from middle of discocellulars widening to outer margin, the cilia black from that point to outer angle. Hind wing black. Underside of fore wing with the apical area fuscous

Hab. Nágas (Doherty) Exp. 42 millim. Type in coll. Elwes

SECT II. (Peribona) Antennæ of male with a sinus and four or five corneous teeth at base of shaft

4873 Tyspanodes venosa, Butl Ill. Het. vn, p 98, pl 135, fig 10

Fuscous brown with a cupreous tinge; from white in male; palpi below, pectus, and legs white Fore wing with large triangular ochreous patch on costa just before middle extending down to vein 6, its apex truncate and whitish, the outer area slightly suffused with grey, the veins and interspaces streaked with brown. Hind wing with traces of grey towards apex; both wings with marginal brown line; the cilia whitish, with a brown line through them Underside almost entirely suffused with grey. Hab Dharmsála, Sikhim, Java. Exp 26 millim.

Genus NEVRINA

Nevrma, Guen Delt & Pyr p 313 (1854) Euglyphis, Hubn Verz p. 341 (? 1818), non descr

Type, N. procopia, Cram.

Range. India, Ceylon, and Burma, Malayan subregion

Palpi upturned, the 2nd and 3rd joints conically scaled and not reaching vertex of head, maxillary palpi filiform; from rounded; antenna nearly simple and minutely annulated towards extremity; tibia with the outer spurs half the length of inner, fore tibia fringed with hair, mid tibia clothed with rough hair on outer side, and hind tibia with a tuft of long hair on outer side near base;

abdomen long, male with the anal tuft large. Fore wing with the costa arched towards apex, the outer margin oblique, veins 3, 4, 5 radiating from angle of cell, 7 curved and approximated to 8, 9, to which 10 also is closely approximated. Hind wing with vein 3 from angle of cell, 4, 5 closely approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8

4874 Nevrina procopia, Cram Pap Erot iv, pl 368, fig E, Moore, Lep Ceyl 111, pl. 182, fig 1, C & S no 4219

Head and thorax orange, abdomen whitish, with dorsal and paired lateral series of black patches. Fore wing with the basal - third orange, a black spot at base and an antemedial spot below



Fig 178 -Nevrina procopia, of

Hind wing with the basal inner area and a median nervure discocellular spot orange, both wings with a hyaline medial hand, the outer half purplish fuscous, the veins white

· Hab. Throughout India, Ceylon, and Burms, Java, Amboms.

Exp 38 millim.

Genus PHRYGANODES

Phryganodes, Guen Delt & Pyr p 353 (1854). Omiodes, Guen Delt & Pyr p 355 Cœnostols, Led Wien ent Mon 1863, p 408 Nagia, Wik Cat xxxiv, p 1320 (1865). Condega, Moore, Lep Ceyl in, p 344 (1886) Charema, Moore, Lep Atk p 218 (1888).

Type, P. plicatalis, Guen, from Brazil. Range Neotropical region, India, Ceylon, and Burma, Malayan

and Australasian subregions.

Palpi upturned and reaching vertex of head, the 2nd and 3rd joints conically scaled and tapering to the apex, maxillary palpi filiform; frons rounded; antennæ nearly as long as fore wing and minutely ciliated, tibize with the outer spurs about half the length of inner; abdomen long. Fore wing with the costa arched towards apex which is produced, the outermargin obliquely rounded, the inner margin somewhat lobed towards base, veins 3, 4, 5 from angle of cell, 7 approximated to 8, 9 for about one-third length, 10 closely approximated to 8,9. Hind wing with the costs arched at middle, the cell short, veins 3, 4, 5 from angle of cell, 6, 7 from upper angle, 7 anastomosing with 8

The typical species has the neuration much distorted in male.

SECT. I. (Omiodes) Antennæ of male with the shaft not excised at basé

- A. Patagra of male unthout long tufts of hair, mid tibice smoothly scaled.
 - a. Wings with the outer margin not excurved at middle nor excised towards apea and anal angles
 - a'. Fore wing of male with no tuft of hair or ridge of scales from base of costa below
- 4875 Phryganodes unitalis, Guen Delt & Pyr p 349, C & S no 4080

 Botys megapteralis, Will. Cat xxxiv, p 1407, C & S no 4165
 Pachynoa opalinalis, Moore, P Z S 1877, p 620, C & S no 4166

Fuscous grey-brown with an opalescent gloss, palpi fuscous, white below, anal tuft ochreous, abdomen of male with long lateral tufts from base. Fore wing with obscure curved antemedial dark line, a speck in cell and discocellular spot, an obscure postmedial line excurved from costa to vein 3, then retracted to angle of cell and slightly excurved again. Hind wing with discocellular spot, an obscure postmedial line excurved from costa to vein 3, then retracted. Underside suffused with whitish, especially towards base of each wing

Hab. Sikhim, Khásis; Andamans, Ceram. Exp 40-44 millim

4876. Phryganodes glyphodalis, Wik Cat xxxiv, p 1488

3. Dull fulvous brown, palpi white below. Fore wing with large dark-edged ochreous discocellular lunule connected with the costal and inner margins by traces of a sinuous line. Hind wing with slight dark line on discocellulars and ill-defined ochreous spot on their outer edge, cilia of both wings grey.

2 with the otherous mark beyond cell of fore wing larger, its lower part expanding into the sinus of the postmedial line between veins 5 and 2, hind wing with nearly complete medial band bent

outwards between veins 5 and 2

Hab Bhután, Ceylon, E Pegu; Sula, Celebes Evp 30 millim.

- 4877. Phryganodes schediusalis, Wik Cat xviii, p 683 Charema carbonalis, Swinh A M N H (6) xiv, p 202
- d Abdomen with large corneous stigmatic valves Fuscous black, palpi white below, coxe and tarsi whitish; wings shot with purple, especially on outer area, the basal area to just beyond middle deeper black and less shot with purple, black discocellular spots, a fine pale line at base of cilia Underside somewhat greyer

Hab Sikhim, Khásis, Andamans, Boineo Eap 30 millim

4878 Phryganodes imbecilis, Moore, Lep Atk p 219, pl 7, fig 23,

Charema scabripennis, Wari A M N H (6) xvii, p 131.

Dark fuscous brown with a slight purplish tinge. Fore wing with an oblique sinuous antemedial black line, a spot in cell and larger discocellular spot, a dentate postmedial line straight from costa to vein 3, then retracted to below end of cell and excurved again. Hind wing with discocellular black spot; a minutely dentate postmedial line bent outwards between years 5 and 2

Hab Sikhim, Khásis Exp 38 millim

4879 Phryganodes unitinctalis, n. sp

Glossy brown, palpi fuscous, whitish at base, legs and underside of thorax and abdomen whitish, fore tibize with a fuscous band. Fore wing with obliquely curved antemedial fuscous line, a spot in cell and one on discocellulars, the postmedial line nearly straight from costa to vein 2, then retracted to below angle of cell and excurved again. Hind wing with the line almost medial, somewhat indistinct, and bent outwards between veins 5 and 2.

Hab E Pegu (Doherty) Exp 30 millim Type in coll Elwes.

- b'. Fore wing of male with a large tuft of long hair from base of costa below
- 4880. Phryganodes lophophoralis, n sp
- o. Differs from *imbecilis* in being paler and greyer; neither wing with the postmedial line waved, hind wing with no discocellular spot, abdomen whitish below, the anal segment black *Hab.* Sikhim (*Moller*). *Exp.* 40 millim Type in coll. Elwes.
 - c'. Fore wing of male with a thick ridge of large scales concealing trifts of long hair on basal half of costa below

4881. Phryganodes pachycraspedalis, n sp

Differs from *unbecilis* in being duller brown. Fore wing with the speck in cell and discocellular spot small, the postmedial line of both wings less prominent, and on fore wing hardly waved from costs to vein 2. Underside whitish

Hab. Margharita, Assam (Doherty) Exp. 36 millim. Type in

coll. Elwes

- b. Wings with the outer margins excurved at middle and excised towards apex and anal angles
- 4882 Phryganodes maculicostalis, Hmpsn. Ill Het ix, p 171, pl 172, fig 12
- J. Smoky black with a slight purple tinge, palpi below, thorax, and legs white Fore wing with curved intemedial line, a postmedial white spot on costa both wings with discocellular black spot and a postmedial line sinuous from costa to vein 2, then retracted to

below end of cell, and on hind wing oblique to near anal angle, cilia tipped with white towards outer angle of fore wing and anal angle of hind wing Underside greyish

Hab Nágas, Ceylon. Esp. 24 millim.

- B. Patagra of male with a tuft of hair extending slightly beyond metathorax, fore tibia with a groove containing a tuft of hair, mid tibia with thick tufts of hair, the inner spur very long and tufted with hair, hind tibia shortened, dilated, and with thick tufts of hair, the inner spurs extremely long, the terminal pair and the tarsus fringed with long hair
- 4883 Phryganodes longipennis, Warr A M N H (6) xvii, p. 132.
- Jull brown, tarsi pale; anal tuft tinged with rufous. Fore wing with the costal area suffused with fuscous, an outwardly oblique antemedial dark line, a spot in cell and discocellular lunule, a dark postmedial line excurved and dentate from costa to vein 2, then retracted to below end of cell, and almost meeting the antemedial line on inner margin. Hind wing suffused with fuscous and with traces of postmedial line angled on vein 3

Hab Khásis; Andamans Evp 38 millim

- C. Patagra of male with long tufts of hair extending far beyond the metathorar, mid tibiæ clothed with rough hair on outer side, abdomen with no lateral tufts of hair from base
- 4884 Phryganodes noctescens, Moore, Lep Atk p 218, C & S no 4235
 - J. Dark fuscous, sometimes with a slight rufous tinge.



Fig 179—Phryganodes noctescens, 3.

the palpi below, pectus, fore legs, mid tibiæ, and abdomen below orange-yellow; the tarsi white, the patagial tufts with a rufous tinge. Fore wing with obscure antemedial oblique fuscous line; a speck in cell and discocellular spot; an obscure postmedial

line, excurved from below costa to vein 3, then bent inwards to below angle of cell; the cilia white-tipped towards outer angle. Hind wing with obscure medial sinuous line.

Hab. Sikhim; Khásis Exp. 38-40 millim.

- 4885. Phryganodes palliventralis, Snell Trans Ent Soc 1890, p 620
- 3 [Differs from noctescens in the palpi below, the pectus, leg, and abdomen below being whitish, the patagial tufts fuscous brown Hab Sikhim, Khásis Exp 30 millim.

4886. Phryganodes analis, Snell Tijd v Ent xxii, p 227 Charema albocılıata, Moore, Lep. Ath p. 219, C & S no 4232

Differs from palliventralis in being browner and less fuscous; the underside of head, thorax, and abdomen unicolorous, the patagial tufts with a fulvous tinge, wings with the lines defined and minutely dentate, the cilia of both wings with the Underside greyish

Hab. Sikhim, Nágas, Calcutta, Celebes, Duke of York Island.

Exp 30 millim

4887. Phryganodes crithonalis, Wlk. Cat xviii, p 682

d Dark fuscous, the tars whitish Fore wing with traces of sinuous antemedial line; a speck in cell, both wings with a discocellular speck, a minutely dentate posmedial line bent outwards between veins 5 and 2, then retracted to below angle of cell and ending near anal angle on hind wing

Hab Khasis, Borneo, Amboina Erp 32 millim

- SECT. II. (Condega) Antennæ of male with the base of shaft greatly excised, patagia with long tufts of hair extending beyond the metathorax.
- 4888. Phryganodes obscurata, Moore, Lep. Ceyl m, p 845, pl 183, fig. 12, C & S. no. 4127
- d. Reddish brown. Fore wing with obliquely waved ante-medial line, a discocellular speck, both wings with a minutely waved postmedial line excurved from costa to vein 2, then retracted to below end of cell; cilia brown at base, pale at tips

Hab. Sikhim; Khásis; Ceylon, Tenasserim Eup 30 millim

Genus OLIGOCENTRIS, nov.

Type, O decrusalis, Wlk. Range. Ceylon, Pulo Laut

Palpi upturned; the 2nd and 3rd joints conically scaled and reaching above vertex of head, maxillary palpi filiform, from rounded; antenne of male with long cilia, male with a tuft of long hair from origin of fore wing below, mid tibue with the outer spurs about half the length of mner, hand tabus with the medial spurs absent, the outer terminal spurs minute, the inner spur enlarged and roughly scaled, female with the medial spurs present, the outer minute Fore wing with the apex rectangular, vein 3 from slightly before angle of cell, 4, 5 from the angle, 7 widely separated from 8, 9, to which 10 is closely approximated Hind wing with vein 3 from angle of cell, which is nearly half the length of wing, 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8, male with fringe of long hair at anal angle.

4889. Oligocentris deciusalis, Will. Cat xviii, p 696, Hmpsn Ill-Het ix, pl 173, fig 13, C & S no 4161

Jellowish brown with a slight cupreous tinge, fore tibiæ



Fig 180 — Oligocentris deciusalis, o

with a black band Fore wing with obliquely curved antemedial line, traces of a speck in cell and another on discocellulars, both wings with an obscure postmedial line excurved from costa to vein 2, then retracted nearly to angle of

cell and excurved again Underside greyish

Hab. Ceylon; Pulo Laut Exp 30 millim

Genus DICHOCROCIS

Dichocrocis, Led Wien ent Mon 1863, p 447 Conogethes, Meyr Trans Ent Soc 1884, p 314 Gadessa, Moore, Lep Ceyl in, p 278 (1886) Dadessa, Moore, Lep Ceyl in, p 333 Phædropsis, Warr A M N H (6) vi, p 476 (1890) Orthospila, Warr A M N H (6) vi, p 477 Zebrodes, Warr A M N H (6) xvi, p 104 (1896)

Type, D pandamalis, Wlk.

Range. Japan and throughout the Oriental and Australian

regions

Palpi upturned, conical, and hardly reaching vertex of head, maxillary palpi filiform, frons rounded; autennæ of male somewhat thickened and almost simple, tibiæ with the outer spurs less than half the length of inner, mid tibiæ fringed with spinous hair on outer side. Fore wing with veins 3, 4, 5 from angle of cell; 7 straight and well separated from 8, 9*; 10 approximated to 8, 9 Hind wing with vein 3 from angle of cell, 4, 5 separate at origin or slightly approximated for a short distance, 6, 7 shortly stalked, 7 anastomosing with 8

- SECT. I. (Dadessa) Hind wing of male with a small tuft of scales on upperside at origin of vein 2, and a tuft of thick short black hair on vein 1 b above anal angle, the veins somewhat distorted, hind leg with a tuft of black hair on outer side of 1st joint of tarsus.
- 4890. Dichocrocis evaxalis, Wil. Cat xix, p. 995, Moore, Lep Ceyl iii, pl 183, fig 3, C & S no. 4029
 Botys aureolalis, Led Wien ent Mon 1863, p 478
 - 3. Differs from punctiferalis in the spots being smaller, fore

^{*} In evaralis, punctiferalis, and festivalis vein 7 is somewhat approximated to 8, 9 at base, and 4, 5 of hind wing somewhat approximated, especially in the males

500 Piralidæ

wing with the antemedial spots conjoined into a sinuous line, the medial spots conjoined as a sinuous line to the line on discocellulars, the postmedial spots forming an almost complete line.

2 with all the markings smaller, the submarginal spots of both

wings reduced to specks

Hab Bhután, Khásis, Ceylon, Sumatra Eap, & 24-30, 9 26-34 millim

SECT II. Hind wing of male with the cell clothed with long hair on underside

4891. Dichocrocis histrigalis, Will. Cat axxiv, p 1848, C & S no. 4814

Bright ochreous, collar, patagia, and abdomen spotted with black. Fore wing with two basal black spots, three subbasal, with two beyond them on costa and inner margin, an antemedial spot in cell and line from median nervire to inner margin, two lunules outlining the discocellulars, with a spot above them on the costa, a medial line from vein 2 to inner margin, an outwardly oblique postmedial line ending on vein 2, with a slight curve and more or less developed spot, a submarginal line from costa to vein 3. Hind wing with discocellular spot, a postmedial triangular spot below the costa, a round spot on veins 3 and 5, and line from vein 2 to inner margin; a submarginal line from costa to vein 5, a spot on veins 3 and 4, and another below vein 2. Both wings with fine black marginal line.

Hab Sikhim, Bhutan Exp 30 millim

SECT. III Hand wing of male without tufts

A (Dichocrocis) Abdomen of male with long protrusible upcurled anal tufts, rarely exserted.

4892. Dichocrocis pandamalis, Will Cat xix, p. 999
Dichocrocis fienatalis, Led Wien ent Mon 1863, p 448, pl 17,
fig 15, C & S no 4298

Orange; palpi blackish above, abdomen slightly ringed with black. Fore wing with black spot at base of costa, antemedial linear spots on costa and inner margin. Both wings with postnedial line straight from costa to vein 4, then usually bent outwards as an almost disconnected spot near the margin and retracted again.

The discocellular spot of fore wing may be absent, and the postmedial line of each wing not bent outwards between veins 5 and 2

Hab Khásis; Nicobars, Java, Pulo Laut, S.E Borneo, Sumbawa. Evp 20 millim

4893 Dichocrocis bilinealis, n sp

Q. Differs from pandamalis in having complete ante- and postmedial black bands on fore wing, the latter straight from costs to vein 2, then slightly retracted Hind wing with medial and postmedial bands, the latter terminating at vein 2 Both wings with slight dark marginal line

Hab Tenasserum (Doherty) Exp 18 millim Type in coll

Druce

B. (Conogethes) Abdomen of male without protiusible anal tufts

a Hind tibiæ of male not fringed with long hair

4894 Dichocrocis punctiferalis, Guen Delt & Pyr p 320 Astura ersealis, Will Cat vix, p 980 Botys meippealis, Wik Cat xix, p 999
Astura guttalalis, Wik Cat xxxxx, p 1381 Astura semifascialis, Wlk Cat xxxiv, p 1381, C & S no 4032 Conogethes nigralis, Warr A M N H (6) xviii, p 168

Bright straw-vellow; palpi black at sides; collar and patagia spotted with black, abdomen with dorsal and lateral series of black



Fig 181 Dichocrocis punctiferalis, &

spots, male with the anal tuft more or less black Fore wing with black spot at base of costa, three subbasal black spots and three antemedial, a spot in cell and discocellular spot, an oblique medial series from lower angle of cell to inner margin, a postmedial sinuous series

with the spots on veins 5 and 2 displaced inwards, a submarginal series with the spot on vein 5 displaced inwards. Hind wing with discocellular spot, a medial series highly excurved between veins

2 and 5, and a sinuous submarginal series

The variety ersealis has the spots small, and in semifascialis the medial area of fore wing from the antemedial spot as far as the medial and below vein 5 to the postmedial is suffused with rufous, in the typical form the spots are of medium size, whilst in a race from Burma which is orange fulvous they are very large

Hab Japan, China, throughout India, Ceylon, and Burma; the Malayan subregion and Australian region Exp 24-32

millim

4895 Dichociocis pluto, Butl A M N. H (5) xx, p 121

Differs from punctiferalis in the ground-colour being reddish brown suffused with fuscous

Hab Tenasserim, Alu, Solomon Isles Eap 28 millim

4896 Dichociocis hæmactalis, Snell Trans Ent Soc 1890, p 592

Bright ochreous, palpi pink, thorax and abdomen spotted with pink Fore wing with pink spots on basal area, an antemedial pink line angled on median nervure, a speck in cell. a medial line angled on median nervure and dentate below it, some streaks beyond lower angle of cell, with a patch below them on inner area, an irregular outwardly oblique postmedial line terminating on vein 2, with spots and streaks beyond it. Hind wing with spots at base and in cell; a postmedial series of spots bent outwards between veins 5 and 2; an irregular submarginal series of spots.

Hab. Sikhim; Bhutan; Pulo Laut, Sumbawa. Exp., of 22,

Q 24 millim.

- 4897 Dichocrocis festivalis, Sunh P Z S. 1885, p 872, C & S. no 4033.
- 2. Orange-yellow, a black spot on shoulders, fore table and tars spotted with black; abdomen with a black speck on anal tuft. Fore wing with large black spot near base of costa and another on inner margin, a sinuous antemedial black band, a speck in cell and large discocellular spot; a sinuous postmedial band, with waved outer edge bent outwards between veins 5 and 2, a marginal fuscous-black band, broadest at apex and outer angle. Hind wing with sinuous black postmedial band bent outwards between veins 5 and 2; a marginal fuscous-black band narrowing to anal angle. Hab. Bombay. Exp 22 millim

4898. Dichocrocus nigrilinealis, W.L. Cat xxxiv, p 1410
Haritala tigrina, Moore, Lep Ceyl 111, p 312, pl 182, fig. 5;
C & S no 4327.
Botys demeter, Snell Trans Ent. Soc. 1890, p 586

White suffused with bright golden yellow, fore legs spotted with black, thorax striped with orange, abdomen banded with orange, a black spot at base of anal tuft. Fore wing with two subbasal orange lines, the former black towards costa and with an orange patch beyond it, an antemedial orange line with black spot on it at costa, a large black discocellular spot, a postmedial line with black spot on it at costa, and oblique to vein 2, along which it is retracted, a curved submarginal line projecting inwards and meeting the postmedial line at vein 2. Hind wing with oblique subbasal and antemedial lines, the latter connected by a streak along vein 2 with the postmedial line, which is joined at vein 2 by a submarginal line, cilia of each wing grey, with a black line at base.

The typical form has the ground-colour rather more uniform

yellow than the form tigrina.

Hab. Dharmsála, Sikhim; Khásis; Bombay, Nilgiris; Ceylon; Lower Burma; Cambodia, Sula, Celebes; Mysol. Exp. 26-36 millim.

4299. Dichocrocis definita, Butl. Ill. Het. vn, p. 97, pl 185, fig. 9.

Differs from nigrilineals in being yellowish fuscous, with no orange tints; the anal, tuft orange and black. Fore wing with the subbasal, ante- and postmedial lines black with pale outlines; the 2nd subbasal line brown. Hind wing with the subbasal line brown

and indistinct, the antemedial and an oblique postmedial line from costa to vein 2 black with pale outline. Both wings with the marginal area brown and not defined by a submarginal line

Hab. Dharmsála, Sikhim; Khásis Exp 34 millim

4900 Dichocrocis plutusalis, Will Cat xvii, p 478, C & S no 4825 Pycnaimon discinotalis, Moore, P Z S 1877, p 617, C & S no 4821

Differs from nigrilinealis in the ground-colour being whiter. Forewing with the postmedial line running down to an acute angle on vein 2, then retracted to the angle of cell, both wings with broad orange submarginal band and the margin whitish, a fine fuscous marginal line and line through the base of cilia

Hab Sikhim, Khásis, Andamans Evp 28 millim.

- 4901. Dichocrocis recurrens, Moore, Lep Ath p 215, pl 7, fig 11; C & S no 4326
- 3. Differs from nynlineals in the markings being brighter. Fore wing with the black marks on the subbasal, antemedial, and postmedial lines reduced to specks, no black discocellular spot; the 2nd subbasal line more oblique, the postmedial line produced to the submarginal band at a very acute angle on vein 2, then retracted to angle of cell, a black spot on the submarginal band above inner margin. Hind wing with no subbasal line, the antemedial line joined by a fascia on inner area and not conjoined to the postmedial line, the submarginal band broad.

Hab Sikhim. Exp 24 millim

4902. Dichocrocis pyrrhalis, Wik Cat xvii, p. 483
Haritala angulifascia, Hmpsn Ill Het viii, p 136, pl 155, fig 10

Differs from nigrilinealis in the ground-colour being silvery white. Fore wing with hardly a trace of black marks on the lines at costa, no discocellular mark, the postmedial line produced to a very acute angle on vein 2 and joined by a diffused orange streak from the discocellulars. Hind wing with no subbasal line. Both wings with submarginal orange band, followed by a white line and a marginal orange band.

Hab Nilgiris, Ceylon, Borneo, Pulo Laut Eip 26 millim.

4903 Dichocrocis plenistigmalis, Warr A M N H (6) xvi, p 477

Reddish orange, palpi fuscous except the 3rd joint. Fore wing with red-brown suffusion on basal area and large patches at middle and end of cell extending almost to costa and below median nervure, an obliquely sinuous antemedial line, a sinuous line from discocellular patch to inner margin, an indistinct postmedial line, oblique from costa to vein 6, then erect and minutely dentate, an indistinct curved maculate submarginal line; the apical area yellower. Hind wing with irregular antemedial grey line; a post-

medial line running into an almost marginal grey band at anal angle.

Hab. Khásie. Exp., of 24, 2 26 millim

- 4904. Dichocrocis rigidalis, Snell Trans Ent Soc 1890, p 631 Ravanoa strigulosa, Swinh A M N. H (6) xiv, p 201
- Q. Head and thorax ochreous white striped with brown, abdomen orange, the base pale, with a lateral pair of brown spots, the anal tuft black, wings ochreous white. Fore wing with three brown bands on basal area, a discocellular brown band, with a streak from its upperside extending below the costa, an oblique brown postmedial band from subcostals to inner margin, joined at vein 2 by a curved band from the costa, a curved submarginal and a marginal band; cilia pale, with a brown line through them. Hind wing ochreous white, with large orange patch occupying the anal area, a short oblique subbasal brown fascia below the cell, a brown discocellular band continued across the orange patch as a curved line, two postmedial bands, which join and terminate at the orange patch, a curved submarginal band terminating at the orange patch, a marginal band not quite reaching anal angle, cilia pale, with a brown line through them.

Hab. Sikhim; Khásis, Shán States. Exp 26 millim

4905. Dichocrocis zebralis, *Moore*, P Z S 1867, p 91, pl 7, fig. 12; C, & S no 4818.

Head and thorax white, the latter striped with black, abdomen orange, the basal segments white with paired lateral black spots and slight dorsal black specks on terminal segments. Fore wing white, with five outwardly oblique black bands on basal half, ending in points on inner margin, the outer four disposed somewhat in pairs, two pairs of inwardly oblique black bands on outer half, the first terminating on vein 2, the 2nd pair nearly reaching inner margin, a marginal black line. Hind wing orange-red, pale towards base, a black discocellular spot and streak from base below the cell, an apical and two submarginal spots, a fine white marginal line.

Hab. Sikhim, Khásis. Exp. 26-32 millim.

4906 Dichocrocis nelusalis, Wik Cat xviii, p 685
Botys chlorophanta, Butl Ill Het ii, p 58, pl 39, fig 8
Hedylepta straminea, Moore, Lep Ceyl iii, p 278, pl. 180, fig. 5
C § 8 no 4348
Gadessa albifrons, Moore, Lep Ceyl. iii, p 279, pl 180, fig 6;
C § 8 no 4360
Botys attemptalis, Snell Trans Ent Soc 1890, p 590
Gadessa subalbalis, Warr A. M N H (8) xvii, p 103

Dull grey, or in the female often bright straw-colour, abdomen with the segments slightly fringed with white, a dorsal black band on terminal segment. Fore wing with slightly curved antemedial fuscous line, a discocellular lunule; a sinuous postmedial line

slightly excurved between veins 5 and 2, then retracted to angle of cell. Hind wing with discocellular spot, a postmedial line running out to an angle on vein 2, then retracted to angle of cell and running obliquely to near anal angle; both wings with the cilia whitish, their bases black.

Hab. Japan, Sikhim, Nilgiris, Ceylon; Andamans, Pulo Laut,

Borneo. Exp. 26 millim.

4907. Dichocrocis megillalis, Wil. Cat xviii, p 700
Botys sordidalis, Snell Trans Ent Soc 1890, p 589
Gadessa characteristica, Warr A M N H (6) xvii, p 103

Brownish ochreous, fore legs, 3rd and terminal segments of abdomen banded with black. Fore wing with short basal line; oblique slightly sinuous antemedial black line, a speck in cell and discoccllular spot, the postmedial line straight and broad from costa to vein 5, then narrower, bent outwards and crenulate between veins 5 and 2, retracted to below end of cell, and waved to inner margin. Hind wing with cell-spot; the postmedial line sinuous and much bent outwards between veins 5 and 2. Both wings with the margin suffused with fuscous, the base of cilia whitish

Some specimens have a wedge-shaped black mark developed beyond lower angle of cell of fore wing between veins 5 and 3.

Hab. Sikhim, Khásis, Nágas; Borneo Evp, & 22, 2 24-30 millim.

- 4908. Dichocrocis credulalis, Snell Trans Ent Soc 1890, p 590 Pleonectusa planalis, Swinh A M N H (6) xiv, p 208
- 6. Fuscous with a slight purple tinge, hind tarsi whitish. Fore wing with black antemedial line slightly angled on median nervure, the costal area beyond it tinged with ochreous; a black discocellular lunule, a postmedial black line expanding into a spot on costa, nearly straight to vein 3, then oblique. Hind wing with discocellular speck, a black medial line, straight and slightly oblique, both wings with fuscous marginal line, the cilia fuscous, with a pale line at base. Underside grey.

Hab. Sikhim, Khásis Exp 28 millim.

4909. Dichocrocis surusalis, Wik Cat xviii, p 695
Botys subjunctalis, Wik Cat. xxxiv, p 1404, Moore, Lep Ceyl.
11, pl 181, fig 6, C & S no 4140
Botys triferalis, Wik Cat xxxiv, p 1428
Botys semifascialis, Snell Tyd v Ent xxiii, p 214, & xxvi, p 131,
pl vii, figs 12 & 12a

Black-brown with a slight cuprescent tinge. Fore wing with a subquadrate yellow spot on middle of costa, its edge sometimes indented, a yellow spot below origin of vein 3, a trifid yellow spot on costa before apex extending down to vein 6, and with a more or less well developed speck on the costa before it

Hab. Japan, Leylon, Borneo Evp. 24 millim.

b. Hind tibue of male fringed with long hair on both sides.

4910. Dichocrocis xuthusalis, Wlk Cat xviii, p 691 Botys onustalis, Snell Trans Ent Soc 1890, p 587

Fuscous brown, palpi pale at base, fore legs banded fuscous and white, abdomen with black band on subterminal segment, the tip black and white. Fore wing with oblique black subbasal and antemedial lines, the former with the outer edge, the latter with the inner edge pale, a discocellular black lunule; an oblique black postmedial line with pale outer edge, slightly sinuous below vein 2. Hind wing with black line from upper angle of cell to anal angle, edged by white on outer side below the cell, and almost met at lower angle of cell by a pale-edged black postmedial line. Both wings with a prominent white marginal line widening to anal angle of hind wing, and a black line at base of cilia which are fuscous. Underside grey.

Hab. Sikhim, Borneo. Exp. 28 millim.

Genus NACOLEIA.

Nacoleia, Wik. Cat xix, p 934 (1859)
Hedylepta, Led Wien ent. Mon. 1863, p 409.
Blepharomastix, Led Wien ent Mon. 1863, p 422.
Pelycyntis, Meyr Trans Ent Soc 1884, p 315
Lotanga, Moore, Lep Ceyl in, p 344 (1886)
Thysanodesma, Butl Ill Het vn, p 96 (1889)
Aplomastix, Warr A M. N H (8) vi, p 478 (1890).
Metasciodes, Meyr Trans Ent. Soc 1894, p 8
Tylostega, Meyr Trans Ent Soc 1894, p 457
Macrospectrodes, Warr A M N H (6) xvii, p 94 (1896).
Idiusia, Wari A M N H. (6) xvii, p 98
Preneopogon, Warr A M N H (6) xvii, p 146
Orthocona, Warr A M N H (6) xviii, p 214 (1896)

Type, N. rhæoalis, Wlk., from Australia.
Range The tropical and subtropical zones

Palpi upturned, reaching vertex of head, the 2nd joint broadly angled with scales, the 3rd short with a small triangular tuft in front, maxillary palpi usually slightly dilated with scales; frons rounded, antennée of male chiated, the patagia usually with a tuft of hair extending beyond the metathorax, tibus with the outer spurs usually half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with vein 3 from angle of cell; 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8.

SEOF I. Antennæ of male without tuft of scales at middle

- A. (Macrospectrodes) Hind wing of male with a large hydrine vesicle on inner margin, patagra without spreading tuft of scales.
- 4911. Nacoleia subargentalis, Snell. Trans Ent Soc. 1890, p 579.
 - of. Uniform glossy fuscous, the hind wing paler Underside

of hind wing white, with dark discocellular spot and traces of postmedial line from costs to vein 3

Hab. Sikhim Exp 30 millim

B Hind wing of male with no vesicle on inner area

- a Patagra of male with a tuft of scales extending beyond metathorax; hind tibia with the outer medial spur half the length of inner
- a' (Hedylepta) For ewing of male with no tufts of large scales in cell
- 4912 Nacoleia barcalis, Wlh. Cat xix, p 1001
 Deba milvinalis, Swinh P Z S 1885, p 875, pl 57, fig 2, Moore,
 Lep Ceyl in, pl 183, fig 11, C & S no 4162

Greyish brown, palpi pale at base. Fore wing slightly suffused with fuscous except on costal area, an obliquely curved antemedial black line, a discocellular speck, a postmedial black line diffused outwards, straight from costa to vein 3, then bent inwards to near origin of vein 2, bent outwards again, and with a diffused black patch in its sinus, cilia fuscous, white towards outer angle Hind wing with discocellular speck, a postmedial line bent outwards and reduced to specks between veins 5 and 2, the cilia white. Underside greyish

Hab Khásis, Calcutta, Bombay, Poona, Nilguis, Ceylon;

Rangoon, Borneo Evp 36 millim

4913 Nacoleia niphealis, Wil. Cat viii, p 638
Botys epastalis, Swinh P Z S 1885, p 874, pl 57, fig 13, C & S
no 4055

Rufous, the palpi white below, abdomen of male with long lateral tufts from base, the anal tuft black. Fore wing with obliquely curved antemedial line, a speck in cell and line on discocellulars, a postmedial minutely dentate line excurved from below costa to vein 2 then retracted to lower angle of cell. Hind wing with discocellular speck, a minutely waved postmedial line excurved to vein 2, then retracted to angle of cell. Both wings with the cilia black at base, white at tips

Hab W Africa, Bombay, Calcutta, Sikhim, Nágas, Nicobars.

Exp. 24 millim

4914. Nacoleia tristrialis, Brem Lep Ost-Sib p 68, pl 6, fig 7 Hedylepta confusalis, Wair A M N H (6) xvii, p 98 Hedylepta ochrifuscalis, Wair A M N H (6) xvii, p 98

Differs from possible in the postmedial line of fore wings being more distinct and evenly curved from costa to vein 2, no marginal series of dark specks; male with the anal tuft black, legs whitish. Hab Amur, Sikhim, Nagas, E Pegu Erp 28 millim.

4915. Nacoleia pœonalis, Wil. Cat xviii, p 639
Botys mlusalis, Wil. Cat xviii, p 685
Botys dairalis, Wil. Cat xviii, p 698
Botys bianoralis, Wil. Cat xix, p 1001

Botys decisalis, Wik Cat xxxiv, p 1451
Botys præteritalis, Wik Cat xxxiv, p 1405, Hmpsn Ill Het ix, pl 178, fig 3, C & S no 4113
Botys korndorffen, Snell Midd-Sum iv, Lep p 62
Acharana similis, Moore, Lep Ceyl in p 286, pl 180, fig 12
Charema fuscipennis, Swinh A M N H (6) xiv, p 202
Pachyzancia granulata, Warr A M N H (6) xvii, p 174

d. Fuscous grey, with a slight yellowish-brown tinge, patagial



Fig 182 -Nacoleia paonalis, 3 1

tufts pale. Fore wing with slightly curved antemedial black line, a black discocellular spot, the postmedial line of both wings oblique from costa to vein 2, then retracted to below end of cell and excurved again, a series of marginal black

specks Hind wing darker fuscous, with marginal black line, the cilia sometimes white at tips Underside pale

2 much more ochreous

Hab Sierra Leone, Japan, Sikhim; Khásis, Nágas, Ceylon;
 E Pegu, Shán States, Borneo, Java, Flores Exp 24 millim.

4916. Nacoleia stigmatalis, Wari A M N H (6) xvii, p 101.

Q Ochreous brown suffused with fuscous, palpi blackich, white below. Fore wing with obliquely sinuous antemedial dark line, prominent ochreous spot in cell and reniform discocellular mark. Both wings with a postmedial line oblique and minutely dentate from costa to vein 2, then bent inwards to below end of cell and sinuous to inner margin, its outer edge defined by ochreous. Hind wing with discocellular spot, cilia of both wings grey, with fuscous line at base

Hab Khásis Exp 26 millim

4917. Nacoleia annubilata, Swinh A M N H (6) xiv, p 203

o. Grey, thickly irrorated with black, abdomen ringed with white. Fore wing with traces of sinuous antemedial line, a dark speck in cell; both wings with dark discocellular spot, a sinuous postmedial line retracted at vein 2 and with diffused fuscous inside it; faint traces of a submarginal line; a marginal series of dark specks and a pale line at base of cilia. Underside much greyer, with the postmedial line represented by specks in the interspaces.

Hab Khásis, Tenasserim Exp 24 millim

4918. Nacoleia aurantifascialis, n. sp.

Q. Black-brown, palpi white below; legs banded black and white Fore wing with very broad golden-yellow postmedial band, its inner edge running from middle of costs to outer angle, its outer edge curved and ending on outer margin at ven 3

Hab. Mao, Manipur (Doherty) Evp 30 millim Type in coll

Elwes.

- 4919. Nacoleia mellealis, Swinh Trans Ent. Soc 1890, p 282
- Q. Ochreous slightly tinged with fulvous, head and collar fuscous, palpi white below. Fore wing with the costal area suffused with fuscous, an antemedial dark speck on median nervure; an ochreous dark-edged discocellular lunule, both wings with a minutely dentate postmedial line bent outwards between veins 5 and 2, the marginal area broadly suffused with fuscous, narrowing to anal angle of hind wing.

Hab. Ganjam; Rangoon Exp 22 millim.

- 4920. Nacoleia cuprealis, Moore, P Z S 1877, p 616, pl 60, fig 13, C δ S no 4268 Platamoma binotalis, Warr. A M. N H (6) xviu, p 177
- Q. Fuscous brown with a slight purplish tinge, abdomen orange except the basal segments; the anal tuft black and white at base. Fore wing with curved antemedial black line, a discocellular lunule; a minute dentate postmedial line arising from a pale-edged spot on costa, nearly straight to vein 2, then recurved to angle of cell; a marginal series of specks. Hind wing with discocellular lunule; a postmedial line nearly straight from costa to vein 2, then recurved nearly to angle of cell and oblique to near anal angle; a marginal black line and line through the cilia, which are grey at tips

d Fore wing with the apex more produced

Hab. Khásis, Nágas, Upper Burma, Andamans Exp. 26 millim

4921. Nacoleia fuscifimbrialis, n sp

- & Pale ochreous irrorated with rufous, palpi blackish at sides. Fore wing with the base of costa and a subbasal line dark, an obliquely sinuous antemedial line, a rufous annulus in cell and reinform discocellular mark with a line from it to inner margin, emitting a spur to join the antemedial line and another spur to join the irregularly crenulate postmedial line, a crenulate submarginal line with diffused fuscous on it, the clia fuscous Hind wing white, the apical part of outer area pale ochreous, with a dark line on its inner edge from vein 6 to 2 and the margin and clia fuscous
- Q with the marginal area of fore wing fuscous except at apex Hab. Hambantota, Ceylon (Pole) Exp. 24 millim Type in B M.
- 4922. Nacoleia vulgalis, Guen Delt & Pyr p 202, pl 8, fig 8, C & S no 4349
 Botys mœliusalis, Wik Cat xviii, p 703
 Botys reductalis, Wik Cat. xxxiv, p 1412

Fulvous yellow, abdomen ringed with white, wings suffused with fuscous except the costa of fore wing. Fore wing with obliquely curved antemedial black line, a speck in cell and disco-cellular spot, the postmedial line arising from a black spot on the

costa, nearly straight to vein 2, then retracted to lower angle of cell and slightly angled on vein 1. Hind wing with discocellular spot, the postmedial line bent outwards between veins 5 and 2, then retracted to lower angle of cell, both wings with marginal black line and line at base of cilia, which are fuscous on fore wing, white on hind wing

Some specimens have hardly any fuscous suffusion

Hab Neotropical, Ethiopian, and Oriental regions Exp. 20 millim

4923. Nacoleia diemenalis, Guen Delt & Pyn p 203
Pyrausta absistalis, Wlk Cat xvii, p 311, C & S no 4338
Asopia lydialis, Wlk Cat xvii, p 374
Botys ustalis, Led Wien. ent Mon 1863, pp 375, 471, pl. x, fig 14
Pyralis incertalis, Wlk. Cat xxxiv, p 1247
Hedylepta pyraustalis, Snell Midd-Sum iv, Lep p 71

Differs from vulgalis in the yellow areas being brighter, the thorax and abdomen fuscous, the latter tinged with white. Fore wing with a fuscous subbasal band, leaving a yellow band inside the antemedial line, the medial area with fuscous on median nervure and in the sinus of the postmedial line, or wholly fuscous except costal area, the outer area of both wings fuscous, leaving a broad vellow band beyond the postmedial line sometimes reduced on fore wing to patches at costa and on inner margin, whilst in the yellower specimens there is often a more or less developed marginal yellow band on both wings

Hab. S Af ica, Formosa, Ceylon, Burma Andamans, Su-

matra, Java, Celebes Fig. Exp 20 millim

b' (Tylostega). Fore wing of male with a tuft of large scales in cell above, and very large fan of scales in cell below.

4924. Nacoleia valvata, Warr A M N H (6) xvii, p 104

d Reddish brown, suffused and irrorated with black; palpi whitish below, abdomen mostly ochreous. Fore wing with the tuft in cell dark, a postmedial black line sinuous from costa to vein 5, then retracted to below end of cell, obsolescent and more prominent again from vein 2 to inner maight, the basal and outer areas most suffused with black, the medial area brown, a marginal series of black specks. Hind wing ochreous, a dark basal patch, a discoccellular line, a postmedial sinuous line excuived between veins 5 and 2, a dark marginal line on apical half and diffused black patch on anal area

Hab. Khásis Exp. 22 millim.

b. Patagra of male short.

a'. (Blepharomastix) Palpi and mavillary palpi of male noimal;
hind tibia with the outer spurs minute

4925 Nacoleia benepictalis, War A. M N H (6) xvii, p 99

J. Head, thorax, and abdomen ochreous, heavily marked with fuscous black, antennæ black, the basal joint white. Fore wing ochreous, the basal area fuscous black, conjoined to a bilobate patch in end of cell and enclosing an irregular antemedial ochreous band not reaching costa, and a spot in end of cell, the medial part of costa fulvous, a waved postmedial black band excurved between veins 5 and 2, and conjoined to the very irregular submarginal markings, which consist of irregular patches on apical area and near outer angle connected by an irregularly dentate line and sending a streak below apex and three at middle to the cilia Hind wing with the base dark, a discocellular spot, a postmedial irregularly waved line bent outwards between veins 5 and 2, an irregularly dentate submarginal band expanding into a large patch on apical area, connected with the postmedial line below middle and at anal angle, and sending some streaks to the cilia

Hab Khásis Exp 30 millim.

4926. Nacoleia insolitalis, Wlk Trans Ent Soc (3) i, p 125

o. Orange; paired black spots on patagia and metathorax; the extremity of abdomen black. Fore wing with a few black specks, a black spot at base of costa, an oval patch from middle of costa to vein 2, an apical black patch suffused with grey, small black patches on inner margin before middle and towards outer angle. Hind wing with irregular medial black band, an apical patch and spot near anal angle.

Hab. Camorta, Nicobars, Borneo Exp 28 millim

4927. Nacoleia scitalis, Swinh P Z S 1885, p 869, C & S.

White, patagia with black-brown spots, metathorax with a black-brown band, abdomen slightly ringed with brown, and with black-brown bands on third and terminal segments. Fore wing with brown spot on base of costa, three subbasal spots, an antemedial curved line with some diffused brown above inner margin between it and the postmedial line, a large annulus in cell and discocellular, elliptical ring-spot. Hind wing with discocellular spot. Both wings with the postmedial line straight from costa to outer margin at vein 3, then retracted to lower angle of cell; a marginal line and line through the cilia.

Hab. Bombay Exp 14 millim

- 4928 Nacoleia Gaxalis, Wik Cat xviii, p 718
 Thysanodesma discalis, Wair A M N H (6) xvii, p 140
- 6. Differs from cyancals (p 321) in being more fulvous yellow Fore wing with the basal area suffused with fuscous, a quadrate white spot in end of cell, the postmedial line not excurved towards inner margin, and the area beyond it fuscous except a yellow spot on costa and another at outer angle. Hind wing with the basal half yellow, with a discocellular black spot, a sinuous medial line bent outwards between veins 5 and 2, the outer area fuscous, with some yellow on margin below middle

Hab. Khásis, Borneo Exp 16 millim

4929 Nacoleia heliaula, Meyr Trans Ent Soc 1894, p 8

Q. Fulvous yellow, palpi white below, fuscous above Fore wing with three black spots on basal part of costa, followed by two annuli and a black spot before apex; an irregularly sinuous antemedial line, an annulus in cell, with a quadrate white spot between it and the incomplete remform discocellular spot, the postmedial line minutely dentate from costa to vein 2, then retracted to below angle of cell and sinuous to inner margin, the marginal area slightly more fulvous, black patches on the cilia at apex and middle Hind wing with postmedial line excurved from costa to vein 2, then retracted to below angle of cell, the apical area fulvous, a black patch at middle of cilia

Hab Shan States; Moment, Burma. Exp. 18 millim.

4930. Nacoleia fusalis, Warr A M N H (6) xvii, p 142

Q Fulvous yellow, head, thorax, and abdomen slightly suffused with fuscous, palpi white below, fuscous at sides. Fore wing slightly suffused with fuscous, more strongly suffused below costs to beyond middle and on almost the whole outer area, a slightly sinuous antemedial black line; an annulus in cell and discocellular reniform spot, the discal area and apical part of costs clear ochreous, a postmedial sinuous line bent inwards at vem 2 to below angle of cell. Hind wing ochreous, with discocellular annulus and line from it to inner margin, a postmedial sinuous line ending at anal angle, an apical fuscous patch continued as a fuscous band on the postmedial line.

Hab Khásis Exp 16 millim

4931. Nacoleia tampiusalis, Wil. Cat vviii, p. 704
Botys ilusalis, Wik. Cat xviii, p. 705, C & S no 4057
Aplomastyx mimula, Hmpsn Ill Het viii, p. 138, pl. 155, fig. 23

Ochreous irrorated with fuscous, abdomen of male with a black spot on anal segment. Fore wing with some fuscous marks at base; a curved antemedial black line; a small annulus in cell and elliptical discocellular annulus, a postmedial line arising from a black speck on costa, straight to vein 5, where it is slightly bent outwards and at vein 2 retracted to lower angle of cell, then excurved again. Hind wing with antemedial line, the postmedial line consisting of three lines in echelon ending at anal angle. Both wings with maculate marginal black line and line at base of cilia.

Hab N.W. Himalayas, Sikhim, Nilgiris; Borneo. Exp 14-22 millim

4932 Nacoleia major, Butl Ill Het vii, p 96, pl. 135, fig 5.

Grey thickly irrorated with fuscous. Fore wing with ill-defined subbasal and antemedial sinuous lines; an annulus in cell and discocellular lunule, a series of black specks on medial part of costa. Hind wing with discocellular speck. Both wings with postmedial oblique line highly excurved between veins 5 and 2; the outer area suffused with fuscous, a marginal series of black specks and line through the cilia.

Hab. Dharmsála, Sikhim; Khásis Exp. 22 millim.

4933. Nacoleia ossea, Butl Ill Het vii, p 96, pl. 135, fig 6

Whitish suffused with fuscous Fore wing with the basal area darkest, a short subbasal dark line, a spot on inner margin; a sinuous antemedial line, an annulus in cell and large discocellular lunule, hind wing with discocellular spot. Both wings with the postmedial line arising from a black spot on costa of fore wing, nearly straight to vein 2, where it has a spot on it, then retracted to lower angle of cell and with a spot on it below the cell; a marginal series of specks.

Hab Dharmsála Exp 24 millim.

- 4934. Nacoleia charesalis, Wlk Cat xviii, p 709
 Botys molusalis, Wlk Cat xix, p 993, Forsayeth, Trans. Ent.
 Soc 1884, p 417 (larva), C & S no 4366
- Q. Dull fuscous brown, head and thorax blackish Fore wing with the basal costal area blackish, a sinuous antemedial line; an annulus in the cell and discocellular pale-centred reniform spot, a sinuous postmedial line excurved between veins 5 and 2, then retracted to near angle of cell, slight fuscous suffusion on outer area below apex and at outer angle. Hind wing with discocellular spot, a sinuous postmedial line bent outwards between veins 5 and 2, then retracted to near angle of cell, both wings with crenulate marginal line.

Larva grass-green with the head black, and lateral black marks on edges of thoracic segments

Hab. Mhow; Ceylon; Borneo; Sumbawa. Exp. 22 millim.

4935 Nacoleia eximialis, Wari A M N H (6) xvii, p 141

6. Yellowish white, mostly suffused and irrorated with black, palpi white below; abdomen ringed with black. Fore wing with sinuous black antemedial line, a black annulus filled in with fuscous in cell and pale-centred reniform discocellular mark, the space between the two yellowish white, a sinuous postmedial line arising from a black spot on a pale costal streak and retracted on vein 2 to angle of cell. Hind wing with double discocellular mark and line from it to inner margin, a sinuous postmedial line from costa to vein 2, the area between the two lines pale, a pale marginal patch below middle.

Hab. Khásis Ewp 16 millim

4936 Nacoleia phaleasalis, Will Cat xviii, p 713.

Pale, slightly suffused and irrorated with fuscous, abdomen banded with fuscous. Fore wing with some fuscous at base; an outwardly oblique sinuous antemedial line, superposed annuli forming a figure-of-8 mark in and below middle of cell, a discocellular annulus and sinuous postmedial line arising from a black spot on costa and expanding into a patch on inner margin, 'diffused conjoined fuscous patches at apex and middle of outer margin; a marginal series of specks. Hind wing with discocellular annulus, a smuous postmedial line excurved between veins 6 and 2, then retracted to below angle of cell, a marginal series of specks.

Hab. Khásis, Borneo Esp 20 millim

b' (Preneopogon). Palps of male fringed below with long han enclosed between the 1st and 2nd joints, the 2nd and 3rd joints being doubled back below, maxillary palps greatly dilated with hair, fore femora with a tuft of long hair from base, fore and mid femora and tibux clothed with rough hair, a large expansible anal tuft

4937. Nacoleia barbata, Warr A. M N H (6) xvii, p 146

6. Pale grey, suffused with pale brown and irrorated with black; abdomen ringed with black, the anal tuft ochreous. Fore wing with curved antemedial black line, incomplete annuli in cell and on discoccillulars, two semicircles on costa beyond middle and two specks towards apex, an oblique waved postmedial line bent inwards below vein 2. Hind wing with black speck in cell; an oblique waved postmedial line bent outwards between veins 5 and 2. Both wings with the outer area suffused with fuscous, a marginal series of specks and a line through the cilia. Hab. Khásis. Exp. 22 millim.

NACOLEIA. 321

- SECT. II (Nacoleia) Antennæ of male with the shaft thickened at middle by slight tufts of scales on upperside, mid tibiæ clothed with rough hair.
- 4938. Nacoleia marionalis, Wlh Cat xix, p 930 Danaga biformis, Butl Ill Het vii, p 94, pl 135, figs 2, 3.
- & Fuscous, palpi below and from white, basal segment of abdomen yellow, the anal segment orange, with black and white marks. Fore wing with alternating black and white costal spots, an obscure sinuous antemedial line, an annulus in cell, a discocellular lunule, the medial area mostly yellow, outwardly defined by the retracted portion of the postmedial line below the cell Hind wing dark at base, the medial area yellow, with a dark discocellular spot, the postmedial sinuous line bent outwards between veins 5 and 2, outer area of both wings fuscous, the culia pale towards apices and outer and anal angles

2 Yellower, fore wing with the sinuous antemedial line, the annulus, and discocellular lunule prominent, the postmedial line prominent, sinuous from the costa to vein 2, then retracted to lower angle of cell, yellow patches at outer angle of fore wing

and middle of outer area of hind wing

Hab Dharmsála, Sikhim, Burma, Borneo Eap 20 millim.

- 4939 Nacoleia præteritalis, Wik Cat xvii, p 372, C & S no 4358.
- d Differs from marionalis in the frons and extremity of abdomen being dark. Fore wing with the medial area dark, an ochreous patch in the sinus of the postmedial line. Hind wing with the medial yellow area much suffused with fuscous, the discocellular spot connected with the inner margin by a line, the postmedial line less retracted below vein 2.

Hab. Punjab; Ceylon, Burma Exp 14-20 millim

4940. Nacoleia cyanealis, Wik Cat xvii, p 405 Metasia zanclogramma, Meyer, Trans Ent Soc 1894, p 8

Differs from marionalis in being pale rufous suffused with fuscous, palpi and frons yellowish, abdomen with a dorsal black band before the anal tuft. Fore wing with the markings prominent, two postmedial annuli on costa. Hind wing with oblique antemedial line and postmedial line bent outwards at vein 5 and terminating at anal angle. Both wings with a marginal maculate line and line through the cilia.

Hab Japan, Kulu, Nilgiris, Ceylon, Shan States; Borneo.

Exp of 18, 2 26 millim

4941. Nacoleia tiasalis, Wik Cat xix, p 994, Hmpsn Ill Het. ix, pl 173, fig 20, C & S no 4359
Asopia microchrysalis, Wik Cat xxxiv, p 1306

_Differs from cyanealis in the fore wing having no annuli on vol. iv.

the costs; the antemedial line conjoined to the annulus in cell, the postmedial line straight from costs to vein 5.

Hab. Ceylon; Australia. Evp. 14 millim.

4942. Nacoleia commixta, Butl A M N H (5) 1v, p 453, Hmpm.

Ill Het. 1x, pl 173, fig 24, C. & S no. 4241.

Nacoleia costiaignalis, Moore, Lep Ceyl. 111, p 273, C & S no. 4357.

Head, thorax, and abdomen whitish and yellow, with extensive black markings; wings yellow, with the discal areas whitish. Fore wing with the basal area suffused with fuscous, a black spot on costa near base, a sinuous antemedial black line, with the area beyond it below median nervure suffused with fuscous; an annulus in cell, and discocellular lunule with a black annulus on the costa above it, a postmedial waved line arising from a black spot on the costa, excurved between veins 5 and 2, then retracted to angle of cell, the area in its sinus and the greater part of the area beyond it, except towards apex, suffused with fuscous Hind wing with the base fuscous; an imperfect discocellular lumile, a waved postmedial line excurved between veins 6 and 5, then running as a diffused band with another diffused band inside it to anal angle, a diffused fuscous patch on apical area extending down to vein 3 Both wings with some black specks on the margin and a line through the culta

Hab. Japan, Dharmsála; Nágas; Nilgiris; Ceylon Esp.

18 millim.

Genus GONIORHYNCHUS, nov.

Type, G. gratahs, Led. Range Japan; China; N.E. India; Burma, Java

Palpi upturned, the 2nd joint broadly and triangularly scaled in front, the 3rd short, naked, and blunt, maxillary palpi filiform, frons rounded, tibis with the outer spurs two-thirds length of inner. Fore wing with veins 3, 4, 5 from angle of cell; 7 straight and well separated from 8, 9. Hind wing with the cell short, veins 3, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I Antennæ of male with the shaft smooth and chiated; fore wing with no foves at base of median nervure.

4943. Goniorhynchus gratalis, Led Wien ent Mon 1863, p. 475, pl. 11, fig 18
Botys minualis, Wik Cat. xxxiv, p 1449.

Bright yellow; tips of palpi, frons, and end of abdomen black-brown. Fore wing with the costal area black-brown, conjoined to two spots in the cell, the outer with white centre, also to a large white-centred discocellular patch; an indistinct, nearly straight antemedial line, a more prominent postmedial line bent ontwards between veins 5 and 2 and dentate on vein 5; the margin and

cilis black-brown, widening at apex and outer angle. Hind wing with discocellular spot, a postmedial line bent outwards between vems 5 and 2 and dentate on vem 5, the margin and cilia black-brown, slightly expanding at vem 2

Hab. Sikhim, Khásis; Margharita, Assam, Tenasserim, Java.

Exp. 18 millim.

SECT. II. Antennæ of male annulated with rings at the joints.

Fore wing with a fovea covered with hair at base of median nervure

4944. Goniorhynchus plumbeizonalis, n sp

d. Ochreous, head and collar brownish; palpi white below. Fore wing with the costa brownish, a slightly waved dark ante-



Fig 183 — Goniorhynchus plumbeizonalis, 3 1

medial line, a prominent black discocellular lunule, the postmedial line bent outwards at costa and between veins 5 and 2, where it is minutely dentate, then retracted to angle of cell and excurved again; the outer area leaden grey Hind wing with minutely dentate ante- and

postmedial lines, the latter running into the outer leaden-grey area at vein 2

Hab. Khásis; Tenasserim (Doherty). Exp 20 millim. Type in B M.

4945 Goniorhynchus flaviguttalis, Warr A. M. N. H (6) xvu, p 140

d. Dark fuscous suffused with grey, palpi white below, abdomen ringed with white. Fore wing with the fovea white, a yellow speck in cell above it; a quadrate yellow spot in end of cell conjoined to an elongate patch below the cell; a large trangular yellow patch on costa beyond middle extending down to vein 3 and traversed by the sinuous black postmedial line, which at vein 3 is retracted to lower angle of cell and crosses the yellow patch below the cell. Hind wing with yellow speck below the cell; a large irregular medial yellow patch from costa to below end of cell, with the incomplete postmedial line beyond it retracted at vein 3 and conjoined to the patch; cilis of both wings grey and fuscous. Underside whitish.

Hab. Khásis. Exp. 20 millim.

Genus DEBA.

Deba, Wk. Cat xxxiv, p 1494 (1865) Phycidicera, Snell. Midd -Sum. iv (1), 8, Lep. p 71 (1880).

Type, D. surrectalis, Wlk

Range N.E. India; Ceylon; Borneo; Celebes.

Palpi upturned, the 2nd joint reaching vertex of head and

slightly fringed in front, with a tuft of hair from extremity hiding the 3rd joint, which is short and blunt. maxillary palpi filiform; trons rounded. Antennæ of male with a small tuft of hair in the form of a vesicle from end of 1st joint, surrounded by a large vesicle formed of nearly conjoined pectanations on the basal part of shaft, which is then serrated for a short distance, tegulæ of male with long tufts of hair extending beyond the metrithorax; the two basal segments of abdomen with long hair on dorsum, tibiæ with the outer spurs about half the length of inner. Fore wing with the costa arched towards apex, the outer margin obliquely rounded, veins 3, 4, 5 from angle of cell; 7 approximated to 8, 9 for about one-third length, 10 also approximated to 8, 9. Hind wing with vein 3 from angle of cell, 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

4946. Deba surrectalis, Will Cat xxxiv, p 1495, C & S no 4164 Phycidicera salebralis, Snell Tyd v Ent xxiii, p 228, & xxvii, p 37, pl. 3, fig 6

d Brown suffused with fuscous, the patagral tufts paler, the anal tuft black. Fore wing with sinuous antemedial black line.



Fig 184 -Deba surrectales, of

the medial costal area pale. a black speck in cell and discocellular bar, the postmedial line black, straight from costa to vein 2, then retracted nearly to the cell, the cilia brown, white-tipped near outer angle of fore wing and on hind wing. Underside

greyer, with the postmedial line represented by a sinuous series of black specks nearer the margin.

Hab Nágas; Ceylon, Celebes. Exp. 30 millim.

Genus CERATARCHA.

Ceratarcha, Swinh A M. N H (6) xiv, p. 200 (1894)

Type, C umbrosa, Swinh.

Range N.E. India.

Palpi upturned, the 2nd joint broadly and triangularly scaled in front, the 3rd short, blunt, and naked, maxillary palpi filiform; frons rounded, antennæ of male annulate; tibiæ with the outer spurs half the length of the inner, mid tibiæ somewhat roughly scaled. Fore wing with the costa arched towards apex, the outer margin excised below apex; veins 3 and 5 from close to angle of cell; 7 and 10 approximated to 8, 9 Hind wing with the outer margin excised below apex, the cell short and veins 4, 5 approximated for a short distance, 6, 7 from upper angle 7 anastomosing with 8.

4947 Ceratarcha umbrosa, Swinh A M N H (6) xiv, p. 200.

d Ochreous brown, the wings strated with black. Fore wing with indistinct subbasal and antemedial lines, a prominent black spot in cell and larger spot at end of it; a sinuous postmedial



Fig 185.—Ceratarcha umbrosa, d

line sharply recurved along vein 2, then wider, the area beyond it much browner. Hind wing with black spot at end of cell, with prominent black irroration below it, a postmedial black line highly excurved and minutely dentate between veins 5 and 2; the outer area browner.

Both wings with marginal series of black spots and white line.

2 much more uniformly suffused with fuscous and with the markings fuscous

Hab. Sikhim; Khásis, Nágas. Exp 34 millim

Genus BOTYODES.

Botyodes, Guen Delt & Pyr p 320 (1854) Endocrossis, Meyr Trans Ent Soc 1889, p. 515

Type, B asialis, Guen.

Range Oriental region, New Guinea

Palpi upturned and reaching vertex of head; the 2nd joint broadly rounded with scales in front; the 3rd naked, short, and blunt; maxillary palpi filiform, frons rounded; antennæ of male minutely cihated, mid tibiæ fringed on outer side with hair; hind tibiæ with tufts of hair on outer side at base and extremity; the outer spurs half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 closely approximated to 8, 9 for about one-third length. Hind wing with the cell short; veins 3, 4, 5 approximated for a short distance; 6, 7 from upper angle or shortly stalked, 7 anastomosing with 8.

SECT. I (Botyodes) Antennæ of male with four teeth on the basal joint enclosing a hollow; mid femora with a small grooved tuft at middle.

4948. Botyodes asialis, Guen. Delt & Pyr p 321, Moore, Lep Ceyl. m, pl 183, figs 1, 1 a (larva), C & S no 4034.

Orange-yellow, male with the anal tuft black. Fore wing with fulvous speck below median nervure near base, an oblique maculate fulvous antemedial line; a speck in cell and discocellular ocellus; an interrupted sinuous postmedial line inwardly oblique from vein 5 to 2, a highly sinuous submarginal line, with the area beyond it fulvous except at apex. Hind wing with discocellular

ocellus; a postmedial sinuous line highly bent outwards between veins 5 and 3; the marginal area fulvous with a grey tinge, narrowing to anal angle and with its inner edge sinuous; both wings with the cilia fuscous, grey at tips.

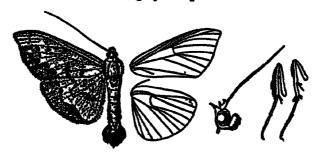


Fig. 186 -Botyodes analis, of

Larva short and thick; olive-green with reddish lateral band; small hair-bearing dorsal and sublateral and two series of larger lateral black spots, head black, the vertex yellow. Pupa green, with short anal point and antennal sheath. Food-plant, Ficus.

Hab. Baluchistan; throughout India, Ceylon, and Burma; Borneo. Exp. 50 millim.

4949. Botyodes principalis, Leech, Enton. xxii, p. 69, pl. 3, fig. 9. Botyodes maculalis, Swinh. A. M. N. H. (6) xiv, p. 198.

Differs from asialis in being sulphur-yellow. Fore wing with the postmedial line reduced to specks, slightly sinuous and more regularly inwardly oblique; the submarginal line only represented by diffused fuseous patches on the inner side of the dark fulvous marginal area. Hind wing with dark discocellular speck; the postmedial line with its sinus dentate and with diffused fuseous patches towards costa and inner margin, a highly dentate submarginal line; a small fulvous apical patch, with fuseous patch on its inner edge, a series of dark specks close to the margin.

Hab. Japan; Khásis. Exp. 44 millim.

- SECT. II. (Endocrossis). Antennæ of male with the basal joint normal, mid femora without the grooved tuft
- A. Hind wing of male with the inner area more or less clothed with long rough hair above and below.
- 4950. Botyodes flavibasalis, Moore, P. Z & 1867, p 96; Felder, Ress. Nov. pl. 185, fig. 41, C. & S. no 4036
- J. Orange; the tibie, palpi, collar, and two basal segments of abdomen with black spots; anal tuft pale yellow. Fore wing with basal black spot; a nearly erect antemedial black line usually interrupted at middle; a grey-brown black-edged discocellular

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band; a broad vinous grey-brown marginal band sending a tooth inwards along vein 2, often conjoined to the discocellular band, and with a black line on its inner edge and traces of a fulvous line on it. Hind wing with a similar marginal band with regular inner edge and narrowing to anal angle

The rough hair on inner area of hind wing is very much more developed in specimens from Sumatra and New Guinea than in

the typical race from India and Burma.

Hab. Sikhim; Assam, Calcutta; Burma; Sumatra; New Guinea. Exp. 36 millim.

B. Hind wing of male without rough hair on inner area.

4951. Botyodes rufalis, n sp

d. Orange fulvous; legs whitish on outer side; anal tuft blackish. Fore wing with the basal and outer areas purplish rufous, the medial area orange-yellow; an antemedial maculate rufous line, a speck in cell and discocellular spot; a maculate postmedial line bent inwards at vein 2 to below angle of cell; the inner edge of outer area sinuous, an orange-yellow apical patch. Hind wing orange-yellow, with discocellular spot, a medial rufous line bent outwards between veins 5 and 2; the outer area purplish rufous, with slightly sinuous inner edge. Underside yellow, the outer area dull purplish, with yellow apical patch to fore wing.

Hab. Tenasserim (Doherty). Exp. 36 millim. Type in coll.

Druce

4952. Botyodes caldusalis, WTk Cat xviii, p 650, C & S no. 4049.

Orange. Fore wing with the basal two-thirds of costa suffused with fulvous; an obliquely sinuous antemedial fuscous line, a speck in cell and discocellular linuile, a maculate postmedial line slightly bent outwards between veins 5 and 2, then retracted to near lower angle of cell, a curved submarginal maculate line. Hind wing with discocellular spot, the postmedial line diffused below costa, maculate and bent outwards between veins 5 and 2, then retracted to near origin of vein 2; a maculate sinuous submarginal line; cilia of both wings fuscous

Hab. Sikhim, Assam; Burma, Java. Exp. 34 millim.

4953. Botyodes patulalis, Wik Cat. xxxiv, p 1405; C. & S no 4070.

Golden yellow, palpi above, sides of frons, and shoulders black. Fore wing with the basal half of costa fuscous; a fuscous spot in cell and a large discocellular lumile; a dark submarginal sinuous line bounding a dark rufous apical patch, then running out to the margin and enclosing a small quadrate rufous patch at outer angle. Hind wing with discocellular fuscous spot, an indistinct line bounding a small apical rufous patch, and traces of a patch on vein 2.

Hab. Dharms la; Sikhim; Khásis. Exp. 40 millim.

Genus PRORODES

Prorodes, Swinh A M N H (6) xiv, p 205 (1894)

Type, P. minica, Swinh Range NE India, Burma

Palpi upturned, the 2nd and 3rd joints conically scaled in female, the 3rd in male broad, hollowed out, and enclosing a tuft of hair; maxillary palpi dilated with scales; from rounded, antenns of male with the base of shaft excised, then toothed, tibis with the outer spurs about half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell; 7 curved and approximated to 8, 9. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

4954. Prorodes mimica, Swinh. A. M. N. H. (6) xiv, p. 205 Notarcha triparalis, Warr. A. M. N. H. (6) xvii, p. 102

d. Fuscous brown, irrorated with brownish-ochreous scales. Fore wing with indistinct curved antemedial series of dark specks;

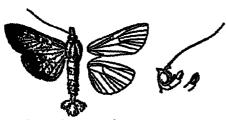


Fig 187 —Provodes mimica, 3 1.

a white speck in cell and small spots on discocel-lulars and below end of cell; a postmedial series of white specks, the three below costa small dentate marks, the small specks between veins 5 and 2 nearer the margin, and the two above inner margin

retracted to below angle of cell Hind wing with pale discocellular speck; a pale maculate postmedial line, highly bent outwards between veins 5 and 2 and ending near anal angle; a fine pale line at base of chia. Underside suffused with grey.

Hab. Khásis, Nágas, Tenasserim. Exp 34 millim.

Genus SYLEPTA.

Sylepta Hubn. Verz p. 356 (? 1818)
Notarcha, Meyr. Trans. Ent Soc 1884, p. 310 (præccc.)
Patama, Moore, Lep Atk p. 209 (1888)
Pramadea, Moore, Lep Atk p. 211
Pleuroptya, Meyr Trans Ent Soc 1890, p. 443
Loxoscia, Warr A. M. N. H. (6) vi, p. 476 (1890).
Hantalodes, Warr. A. M. N. H. (6) vi, p. 476.
Pardomima, Warr. A. M. N. H. (6) vi, p. 477.

Type, S amando, Cram., from S America.

Range The tropical and warmer temperate zones.

Palpi upturned and reaching vertex of head, the 2nd joint moderately and evenly scaled in front, the 3rd short, naked, and blunt; maxillary palpi filiform, frons rounded, antenna of male ciliated; tabia smoothly scaled, with the outer spurs about

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half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell. 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with the cell short, vein 3 from the angle, 4, 5 somewhat approximated for a short distance, 6, 7 from upper angle.

SI LEPTA

- SECT I (Patania) Hind tibiæ of male with a large tuft of hair and long flattened scales on inner side before the medial spurs
- 4955. Sylepta concatenalis, Will Cat xxxiv, p 1408, C & S no 4299
- d Fuscous brown with a cupreous tinge, palpi below, pectus, legs, and abdomen below yellowish white. Fore wing with ochreous speck in end of cell, a postinedial lumilate ochreous mark expanding on the costa and extending down to vein 3; a slight ochreous mark on costa before apex. Underside with the basal half of wings pale yellowish.

Hab. Sikhim Evp. 30 millim.

- SECT. II Hind tibiæ of male fringed with long black hair on outer side, abdomen with paired tufts of black hair from base below, hind wing with a large tuft of black hair from inner margin near base.
- 4956 Sylepta tibialis, Moore, Lep. Ath p 216, C & S no 4307.

Pale ochreous yellow, basal joint of antennæ black, fore legs marked with black, thorax spotted with black, abdomen orange, the base pale, with paired black spots on basal segments and another pair before the anal tuft. Fore wing with subbasal and antemedial bands, a medial band with pale mark on discocellulars, and giving off an oblique line to join the submarginal band at inner margin, a marginal band continued along inner margin to the submarginal band. Hind wing with oblique medial line terminating at anal angle, an oblique submarginal band joining the marginal band, and both terminating on vein 2, both wings with the cilia fuscous with a pale line at base

Hab Sikhim, Khásis; Nilgiris Evp 22 millim

SECT III Hind tibiæ, abdomen, and hind wing without tufts of hair

A Antennæ of male not encised at base

- a Fore wing narrow, with the apex much produced and outer margin oblique.
- a' Hind wing with the outer margin angled at vein 2, antennæ of male with the shaft not fringed with scales.
- 4957 Sylepta pronaxalis, Will Cat vviii, p 688
 Pardomima acutalis, Hmpsn Ill Het 12, p 171, pl 174, fig 16
 - d. Head and thorax ochreous and brown, abdomen fuscous

black, with a pale dorsal spot at base; the anal tuft whitish and black. Fore wing with the basal area fuscous brown, bounded by an oblique antenedial line; the medial area ochreous, a disco-cellular black-edged remiform mark, a postmedial line straight from costa to vein 5, bent outwards to vein 2, and with some brown in its sinus, then retracted to lower angle of cell, the area beyond it brown. Hind wing fuscous brown, with indistinct oblique medial and postmedial lines from costa to vein 2, a marginal yellow line from apex to the angle at vein 2.

Hab. Ceylon; E Pegu, Tenasserim; Borneo. Exp. 26 millim.

b. Hind wing with the outer margin oblique, antennæ of male with the shaft thickened and thickly fringed with hair for a short distance near base.

4958. Sylepta obliquifascialis, n. sp

Ochreous; thorax striped with brown; abdomen ringed with black, orange towards extremity, the anal tuft black and white. Fore wing with two oblique subbasal lines hardly reaching inner margin; a more prominent antemedial line, with a spot beyond it in the cell, a medial band wide at costa, narrowing to mner margin; an oblique postmedial band from costa to vein 5, where in male it touches the medial band from costa to vein 5, where in male it touches the medial band and joining it again on inner margin, the marginal band running round outer angle. Hind wing with the whole area between the cell and inner margin orange; an oblique medial line; a postmedial band broad at costa, narrowing to vein 2, where it curves inwards and becomes obsolete; a marginal band expanding inwards on vein 2 and becoming obsolete.

Hab. Rangoon; Upper Burma (Watson). Exp. 24 millm.

Type in B. M.

4959. Sylepta chromalis, Wik. Cat xxxiv, p 1453

d. Differs from obliquifascialis in the medial line of fore wing not reaching the costs and embracing a discocellular lumile, the postmedial line from costs and the line from the marginal band not oblique but parallel to the margin. Hind wing with no orange patch, the medial line embracing a discocellular spot, the postmedial straight, submarginal line from costs to vein 2, and a marginal line.

Hab. Sikhim; Java. Exp. 30 millim.

- b. Fore wing broader, the apex not produced and the outer margin more erect.
 - a'. (Sylepta). Thorax of male with no fan of scales from origin of hind wing below.
 - a2. Retinaculum of male normal.
- 4960. Sylepta chalybifascia, n sp
 - d. Pale yellow; abdomen tinged with fuscous at middle; wings

pale glossy and semi-hyaline yellow. Fore wing with occilate antemedial mark extending from costs to inner margin, enclosing a pale centre, its edges rufous and steel-blue; a steel-blue and rufous wedge-shaped fascia on inner area from the antemedial mark to the nearly straight black submarginal line, which expands into a spot at costs and is broken near inner margin; the discocellulars and veins beyond the cell marked with rufous; a faint diffused rufous line just inside the margin; the apex blackish, with a white spot below it. Hind wing with discocellular blackish band; the inner area tinged with rufous and with three curved black bars on it, a dark submarginal line from costs to vein 2 with diffused rufous beyond it.

Hab. Nágas (Doherty). Exp. 22 millim. Type in B. M.

4961. Sylepta gastralis, Wil. Cat xxxiv, p 1356; C & S no 4305

Differs from tibials in the fore wing having the subbasal line broken up into two spots, the pale discocellular lunule larger, the medial line angled outwards above inner margin, so that it approaches or joins the oblique line and also gives off a fascia to join the antemedial line, a brown fascia connecting the submarginal with the marginal band above middle. Hind wing with the submarginal band sending a spur inwards along vein 2 towards the medial line.

Hab Dharmsála, Sikhim, Khásis Exp 36 millim

- 4962. Sylepta scinisalis, Wlk Cat xvin, p 648, C & S no 4040 (part.)
 Botys restrictalis, Snell Trans Ent Soc 1890, p 584
- o. Orange-yellow, fore tibue fuscous at extremity Fore wing with slight fuscous spots at base and near base of inner margin; traces of an oblique sinuous antemedial line; a black spot in cell and larger discocellular spot, the outer area greyish fuscous, with slightly sinuous inner edge and small orange patch on costa near its inner edge. Hind wing with the basal half orange, with black discocellular spot, the outer half greyish fuscous

The form restrictals from Sikhim has the basal area of both

wings fuscous

Hab. NW Himalayas; Sikhim; Khásis; Moulmein Exp. 36 millim.

4963. Sylepta costalis, Moore, Lep Ath p 221, C. & S no 4035

c. Head, thorax, and abdomen ochreous, more or less suffused with fuscous, fore this fuscous at extremity. Forewing ochreous; the basal area more or less suffused with fuscous as far as the obliquely sinuous antemedial line, or in the typical form the whole inner area suffused with fuscous to the marginal band, leaving an ochreous fascia along costa only; a spot in cell and larger discocellular spot, the postmedial line slightly excurved between veins

5 and 3, and with the whole area beyond it fuscous except an ochreous streak on costa. Hind wing ochreous, the basal area below the cell fuscous, a discocellular lunule, the outer half of wing fuscous with sinuous inner edge, or in the typical form the whole wing is fuscous, obscuring the markings

Hab Sikhim; Khásis Exp. 38 millim.

4964. Sylepta sellalis, Guen Delt & Pyr p 330, C & S no 4169.

Botys consumilalis, Led Wien ent Mon 1863, p 471

Botys disjunctalis, Wil. Char Undescr Het p 96, C & S.

no 4040 (part)

Botys sciniscalis, Moore, P Z S 1877, pl 60, fig 11 (nec Wil.)

Differs from costolis in the head, thorax, abdomen, and base of fore wing not being suffused with fuscous; the last with the antemedial line curved, the postmedial line bent outwards between



Fig 188 - Sylepta sellalis, &

veins 5 and 2, enclosing an ochreous patch in its sinus below vein 2 and with a costal patch beyond it extending down to vein 6 Hind wing with no fuscous on basal inner area, the discocellular spot larger, the outer fuscous area with some diffused ochreous near its inner edge from vein 5 to inner margin and also on the outer margin

Hab Sikhim; Khásis, Burma; Andamans, Perak, Ternate;

Amboina Exp 40 millim.

4965. Sylepta bipunctalis, Warr P. Z S 1888, p 333, C & S. no 4240.

d Differs from costalis in being paler; head, thorax, and abdomen more or less suffused with fuscous. Fore wing with the basal and almost the whole inner area suffused with pale fuscous, extending round the lower angle of cell beyond the discocellulars; the postmedial line less bent inwards along vein 3. Hind wing with the basal inner area slightly tinged with fuscous; the discocellular spot larger, the postmedial line outlined with pale suffusion.

Q paler, with more pale suffusion beyond the postmedial line of fore wing on costal and inner areas and a broad band of it on hind wing.

Hab Dharmsála, Thandiáni. Exp. 34-36 millim.

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4966. Sylepta verecunda, Warr A M N H (6) xvii, p 167.
Botyodes fraterna, Moore, Lep Atk p 221, pl 7, fig 16 (præocc);
C. & S no 4037.

Differs from bipunctalis in being more ochreous. Fore wing with hardly any fuscous suffusion on basal and inner areas, the spots in cell and on discocellulars reduced. Hind wing with the outer area uniform fuscous, its inner edge almost straight and only slightly indented at vein 5.

Hab. N.W Himalayas; Sikhim; Khásis; Nilgiris; Ceylon

Exp. 28 millim

4967. Sylepta angustalis, Snell Trans. Ent Soc. 1890, p 585

Fulvous yellow; palpi black at sides, white below; male with the anal tuft black. Fore wing with the basal area suffused with fuscous to the postmedial line, an obliquely sinuous fuscous antemedial line; a spot in cell and discocellular lunule, the postmedial line minutely dentate, slightly bent outwards between veins 5 and 2, then retracted to lower angle of cell, and expanding into a spot above vein 1, the outer area fuscous, expanding inwards to the postmedial line above vein 5 and again expanding on the inner margin. Hind wing with discocellular spot; a minutely dentate postmedial line highly bent outwards between veins 5 and 2, the outer area fuscous, narrowing at middle

Hab. Sikhim; Khásis Exp 30 millim

4968. Sylepta sabinusalis, Wik Cat xviii, p 708
Botys imbutalis, Wik Cat xxxiv, p 1442
Botys sublituralis, Wik Cat xxxiv, p 1452, C & S no 4076
Notarcha butyrina, Meyr Trans. Ent. Soc. 1886, p 260
Botys ruralis, Snell Trans. Ent. Soc. 1890, p 588 (nec. Scop.).
Notarcha dubia, Hmpsn Ill Het. viii, p 136, pl 155, fig 16

Ochreous with a slight fuscous tinge. Fore wing with outwardly oblique sinuous antemedial fuscous line, a speck in cell and discocellular lunule; the postmedial line nearly straight from costa to vein 5, then bent outwards and minutely dentate to vein 2, along which it is retracted nearly to the cell. Hind wing with discocellular spot, a postmedial line highly bent outwards and minutely dentate between veins 5 and 2; the marginal area slightly suffused with fuscous

Specimens from the Khási Hills are more fuscous in tone Hab. N.W. and E. Himalayas; Khásis, Karáchi, Bombay; Nilgiris, Ceylon, Borneo, Java; Celebes; Sumbawa, New Britain; Solomons, Fiji Exp 32-36 millim.

4969. Sylepta ultimalis, Wil. Cat xviii, p 659, Hmpsn Ill Het ix, pl 172, fig. 8, C & S no 4105

Olive-grey. Fore wing with the costs slightly ochreous; traces of a spot in cell and another on discocellulars, an indistinct postmedial line excurved from costs to vein 2, then retracted to angle of cell and slightly excurved again. Hind wing with traces of disco-

cellular spot and postmedial line highly bent outwards between veins 5 and 2.

Hab. Ceylon; Rangoon. Exp. 32 millim.

4970. Sylepta multilinealis, Guen Delt & Pyr. p 387, pl. 8, fig. 11, C & S no 4306

Zebronia salomealis, Wik Cat xvii, p 476.

Botys otysalis, Wik Cat xviii, p 728

Botys annuligeralis, Wik Cat xxxiv, p 1424

Botys basipunctalis, Brem. Lep Ost-Sib p. 68, pl. 6, fig 8

Yellowish white, the head and thorax spotted with black and brown, abdomen with segmental brown rings, a pair of black spots or dorsal band on 2nd segment and one or two black spots towards extremity. Fore wing with two subbasal series of blackbrown spots often developed into lines, an oblique antemedial line, an annulus in cell and smaller one below it, a large remform discocellular mark; a postmedial sinuous line highly bent outwards between veins 5 and 2, and usually with a line across its sinus; the veins of outer area streaked with brown, a minutely dentate submarginal line slightly angled on vein 2, a marginal line. Hind wing with discocellular annulus touching an oblique minutely dentate antemedial line, a sinuous postmedial line, highly excurved and dentate between veins 5 and 2, its sinus crossed by a dentate line; a minutely dentate submarginal line bent outwards to anal angle, a marginal line

The Sikhim race has the markings very dark.

Hab. W. Africa; E. Siberia; Japan; China, throughout India, Ceylon, and Burma; the Malayan subregion and Australian region. Exp. 28—40 millim.

4971. Sylepta iopasalis, Wik. Cat. xvni, p 652. Moore, Lep Ceyl ni, pl 182, fig 14; C & S no 4095.

Botys plagiatalis, Wik. Cat xvni, p 673, C & S. no 4101.

Botys boteralis, Wik. Cat xvni, p 716

Rotys orohenalis, Snell Tyid. v Ent xxin, p 211, & xxvi, p 130, pl 7, fig 7

Botys tardalis, Snell Tyid. v Ent. xxin, p 210, & xxvi, p 180, pl 7, fig 6.

Botyodes leopardalis, Moore, Lep Atk p 221, pl 7, fig. 26, C & S no 4089

Notarcha tenuis, Warr. A M N. H. (6) xvii, p 102

Bright ochreous; the head and thorax suffused with purplish fuscous, palpi purplish fuscous towards extremity, abdomen with a pair of lateral fuscous spots on 3rd segment, and black dorsal line on penultimate segment. Fore wing with subbasal and oblique antemedial fuscous lines, the area between them more or less suffused with purplish fuscous; a speck in cell and discocellular annulus filled in with fuscous; the postmedial line straight from costa to vein 5, bent outwards and minutely dentate from veins 5 to 2, then retracted to near lower angle of cell and sinuous to inner margin, the area beyond it suffused with purplish fuscous,

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usually leaving patches of ochreous on apical area and below middle, a marginal series of specks. Hind wing with discocellular spot; a postmedial line highly bent outwards and minutely dentate between veins 5 and 2, then continued to anal angle as two diffused bands, the apical area suffused with purplish fuscous; a more or less complete marginal series of specks

Plagiatalis, which is probably the dry-season form, is smaller with all the dark markings reduced, fore wing with the bent-out portion of the postmedial line reduced to specks and small dark

marks beyond it below apex and above inner margin.

Hab. Formosa; Sikhim; Assam; Karáchi; Nilgiris; Ceylon; Burma, Andamans; Borneo, Amboina, Sumbawa; Timor Laut; Australia Exp. plagiatalis, 24, iopasalis, 26-36 millim.

4972 Sylepta mysisalis, Will Cat xviii, p 684
Gadessa impuralis, Warr A M N H (6) xviii, p. 167.

Pale ochreous Fore wing with oblique sinuous antemedial fuscous line, a spot in cell and discocellular lunule, the postmedial line excurved between veins 5 and 3, then retracted to below angle of cell and sinuous to inner margin, a marginal fuscous band narrowing to outer angle. Hind wing with discocellular spot, the postmedial line highly bent outwards between veins 5 and 2, a marginal fuscous band slightly widest at apex.

Hab W. Africa; Khásis, Nilgiris Exp. 26 millim

4973 Sylepta venustalis, Swinh. A M N H (6) xiv, p 199

d. Differs from aurantiacalis in being orange. Fore wing with the spot in cell, the ante- and postmedial lines, hind wing with the discocellular spot and postmedial line, stronger and blacker, no fuscous on outer area except at apex of hind wing, a series of marginal fuscous specks and the cilia fuscous.

Hab Khásis Exp 40 millim.

4974. Sylepta nigriflava, Swinh A M N. H (6) xiv, p. 199

o. Differs from aurantiacalis in being orange Fore wing with no spot in cell, the discocellular spot of both wings, the antemedial line of fore wing, and postmedial line of both wings blacker; the outer area and margin unmarked.

Hab. Sikhim, Khásis Exp. 30 millim.

4975. Sylepta dissipatalis, Led. Wien ent. Mon 1863, p. 474, pl 11, fig 13
Samea quinquigera, Moore, Lep Ath p 207, pl 7, fig 14, C & S no 4249

Fuscous brown with a cupreous tinge, the collar and basal segment of abdomen whitish, some white before the anal tuft. Fore wing with curved antemedial line; a diffused yellowish-white patch inside it below the cell, a quadrate spot in end of cell; the postmedial line slightly bent outwards between veins 5 and 2, then retracted to near the angle of cell, a large yellowish-

white patch inside it from the costs to vein 2, a small spot beyond it below the costs and small spots inside and beyond it between the cell and inner margin. Hind wing with the basal area yellowish white, a dark-edged remform discocellular spot; the postmedial line nearly straight from costs to vein 2, then retracted to near angle of cell and conjoined to the marginal brown area near anal angle, a narrow ochreous band beyond it from costs to vein 2 and from vein 2 to near anal angle; chia whitish towards outer angle of fore wing and on greater part of hind wing.

Hab Sikhim, Khasis; Ceylon, Tenasserim. Exp. 28 millim.

4976. Sylepta quadrimaculalis, Koll Hug Kaschm 1v, p 492; Led.

Wien ent Mon 1863, pl 16, fig 12

Nagia desmialis, Wil. Cat xxxiv, p 1320

Coptobasis quadrimaculalis, C & S no 4274 (nec Brem & Grey)

Fuscous brown, palpi below, pectus, legs, and abdomen below white. Fore wing with traces of oblique antemedial line, and of two dark specks in cell with a pale speck between them, a whitish patch beyond the cell from vein 7 to 3, its lower part expanded outwards and dentate, its outer edge bounded by the obscure postmedial line, which is retracted below the patch to origin of vein 2 Hind wing with large whitish patch beyond the cell, its outer edge dentate on vein 4, clia whitish towards outer angle of fore wing and anal angle of hind wing. Underside suffused with greyish white.

Hab Japan; N.W. Himalayas, Sikhim; Khasis; Borneo. Exp. 38 millim.

4977. Sylepta subalbidalis, Swinh A. M. N. H. (6) xiv, p 201

3. Uniform smoky black, legs and abdomen below whitish; wings with slight purplish reflections; an indistinct discoccillular dark spot, an indistinct postmedial line bent outwards and minutely dentate between veins 5 and 2, then retracted to below angle of cell. Underside suffused with grey, fore wing with dark spots in cell and on discoccillulars; the postmedial line prominent, expanding into dark spots below veins 6 and 2 of hind wing.

Hab. Khásis Exp. 26 millim.

- 4978. Sylepta ogoalis, W.R. Cat xviii, p 689 Coptobasis colomboensis, Moore, Lep. Ceyl iii, p 556, pl 215, fig 13, C & S no 4266
- d. Fuscous with a purple gloss; head with slight rufous tinge, palpi white below at base. Fore wing with obliquely curved ante-medial black line; a speck in cell and discocellular spot, the postmedial line nearly straight from costa to vein 2, then retracted to near angle of cell and outwardly oblique to inner margin. Hind wing with faint traces of discocellular spot and curved medial line. Underside pale

Hab Ceylon, Borneo. Exp 26 millim

4979. Sylepta deficiens, Moore, Lep. Ceyl m, p 556, pl. 215, fig 12, C & S no 4269.

Fuscous brown, palpi white below, underside of thorax and abdomen white, wings of a silky texture. Fore wing with an obliquely curved antemedial line, a speck in cell and discocellular lunule, a postmedial minutely waved line with large ochreous white lunule on it below costs and bent inwards along vein 2. Hind wing with discocellular speck, an indistinct postmedial line bent outwards between veins 5 and 2 and obscurely outlined with whitish

Hab. Dharmsála, Sikhim, Ceylon. Exp 26 millim.

- b'. Retinaculum of male formed by a fan of large white scales.
- 4980. Sylepta paucistrialis, Warr. A. M. N. H (6) xvu, p 139.
- d. Pale ochreous. Fore wing with the base of costa narrowly black; a fuscous antemedial spot on inner margin, a discocellular spot; a postmedial line extremely and very irregularly dentate from vein 6 to inner margin, some of the dentitions nearly reaching outer margin. Hind wing whitish, with a fuscous postmedial line between veins 6 and 2 and a slight marginal line.

Hab Bhután, Khásis. Exp 20 millim

- b. (Pleuroptya) Thorax of male with a fan of large scales from origin of hind wing below
- 4981. Sylepta aurantiacalis, Fisch v Rostl Schmett. p. 213, pl. 75,

Botys crocealis, Dup Lép Fr vni, pt 2, p 365, pl 235, fig 6 Botys aurea, Butl Ill Het m, p. 76, pl 59, fig 12; C & S. no 4046

Hapalua fraterna, Moore, Lep. Ceyl. m, p. 338, pl. 183, fig. 9; C. & S no. 4093.

Ochreous with a fulvous tinge, palpi fulvous, white below. Fore wing with obliquely sinuous antemedial fuscous line, a spot in cell and discocellular lunule; the postmedial line straight from costa to vein 5, bent outwards and minutely dentate between veins 5 and 2, then recurved to origin of vein 3 and sinuous to inner margin, a more or less prominent marginal fuscous band, broad at apex, narrowing to near outer angle, where it expands into a patch. Hind wing with discocellular speck, a postmedial line highly bent outwards between veins 5 and 2; a marginal band, broad at apex, then narrowing and becoming maculate. Thorax with the fan of scales pale.

Hab S. Europe; Japan, China, throughout India, Ceylon,

and Burma. Exp. 34-36 millim.

- 4982. Sylepta pernitescens, Swinh A. M. N. H. (6) xiv, p. 203. Pleuroptya fuscalis, Warr A. M. N. H. (6) xviii, p. 165.
- J. Differs from sabinusalis in being darker, with a slight fulvous vol. iv.

tinge and suffused with fuscous; fore wing with the lines darker, the postmedial line more bent outwards between veins 5 and 2, the outer margin broadly fuscous, tapering to anal angle of hind wing. Thorax with the fan of scales bright ochreous.

Hab. Japan, Khásis. Ewp 36 milhm.

B. (Pramadea). Antennæ of male with a tooth of scales from upperside of basal joint, the shaft excised at base.

4983. Sylepta denticulata, Moore, Lep. Ath p 211; C. & S no. 4488.

Grey brown suffused with fuscous, palpi white below, fore tibias spotted with black; abdomen with slight pale rings and black dorsal marks towards extremity. Fore wing with indistinct pale curved antemedial line slightly defined with black, a pale black-ringed speck in cell and discocellular lumile; a postmedial indistinct minutely dentate pale line, excurved between veins 5 and 2, slightly defined by black, and with a black band on its inner side from vein 2 to inner margin. Hind wing with black-ringed pale discocellular speck, a minutely dentate pale postmedial line slightly defined with black and much bent outwards between veins 5 and 2, traces of a waved grey submarginal line, both wings with the culin black-spotted.

Some specimens are much more uniform grey-brown without any fuscous suffusion and the markings very faintly defined with

black.

Hab. Sikhim, Khásis; Nágas. Exp. 34 millim.

4984. Sylepta carbatmalis, Swinh Trans Ent Soc 1890, p 288, pl 8, fig 18
Polycorys seminigralis, Warr. A. M. N. H (6) xviii, p 172.

Q. Fuscous brown Fore wing with obscure smuous ante-medial line; an annulus in cell and discocellular lumule; a post-medial minutely dentate line with pale lumules on it, straight from costa to vein 2, then retracted to below angle of cell. Hind wing with pale discocellular speck, a minutely dentate postmedial line with pale lumules on it excurved between veins 5 and 2; both wings with pale line at base of cilia. Underside suffused with greyish.

d suffused with ochreous; fore wing with pale speck in cell and lunule at end of it, both wings with diffused ochreous on

inner side of the dentate postmedial line.

Hab. Nágas, Rangoon. Exp. 32 millim.

4985. Sylepta cohæsalis, Wlk Cat xxxiv, p 1418. Notarcha halurga, Meyr Trans Ent Soc 1886, p 259 Coptobans subsenescens, Warr. A. M. N. H. (6) xvii, p. 188

Dark fuscous with slight purplish reflections. Fore wing with curved antemedial line, a speck in cell and discoccilular annulus; hind wing with obscure discoccilular line, both wings with the

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postmedial line straight from costa to vein 2, then retracted to lower angle of cell

Hab. Khásıs, Nılgırıs, Sula, Celebes; Australia; Fiji. Exp. 30 mıllım.

4986. Sylepta crotonalis, Wlk Cat. xix, p 997, C & S no. 4267

Fuscous with slight tinge of rufous and purple Fore wing with obliquely sinuous antemedial black line, a small annulus in cell; a discocellular lunule, a dentate postmedial line nearly straight from costa to vein 2, then retracted to below angle of cell Hind wing with obscure dark discocellular mark, a postmedial dentate line slightly excurved between veins 5 and 2 Underside suffused with grey.

The male has the tuft of hair on basal joint of antennæ large.

Hab. Sikhim, Khásis, Ceylon Exp. 32 millim

4987. Sylepta fraterna, Moore, Lep Ceyl in, p 292, pl. 181, fig. 8; C & S no. 4270

Differs from crotonalis in being much darker fuscous; fore wing with the annulus in cell reduced to a speck; the discocellular lunule small, the postmedial line minutely dentate and more excurved between veins 5 and 2.

Hab Nilgiris, Ceylon. Exp. 28 millim.

4988 Sylepta ridopalis, Swinh Trans Ent. Soc. 1892, p 18

Differs from crotonalis in the tuft on basal joint of antennæ of male being small; the colour greyer fuscous. Fore wing with white-centred speck in cell and discocellular lunule; the postmedial line of both wings slightly defined by pale colour, hind wing with the cilia white-tipped. Underside with whitish suffusion.

Hab Khásis, E. Pegu, Tenasserim Exp. 30 millim

4989. Sylepta lunalis, Guen Delt & Pyr p 352, C. & S. no 4271.

Botys thyasalis, Wlk Cat xviii, p 734

Coptobasis incrassata, Wari A M N H (6) xviii, p. 171.

Differs from ridopalis in the postmedial line of neither wing being minutely dentate. Underside with slight greyish suffusion; abdomen with slight segmental dorsal white bands towards extremity.

Hab. Formosa, throughout India, Ceylon, and Burma; Anda-

mans; Borneo, Celebes, Sumbawa. Exp. 30 millim.

4990 Sylepta adductalis, Wik Cat xviii, p 669, C & S no 4263
Coptobasis luminalis, Led Wien ent Mon 1863, p. 482 pl. 16,
fig 10

Differs from lunalis in the postmedial line of both wings having a white lunule on it from below costa to vein 5 and a white spot or slight pale outline below vein 2 of fore wing.

Hab. Nilgiris, Ceylon; Java Exp. 22-30 millim

4991. Sylepta textalis, Led Wien ent Mon 1863, p 482, pl 16, fig 9; C & S no. 4275 Coptobasis sensalis, Sunh P. Z S 1885, p 867, C & S no 4264.

Differs from adductals in the antemedial line of fore wing being inwardly defined by white; hind wing with the basal area pale, both wings with the white mark beyond the postmedial line from below costs to vein 5 larger, the part of the line between veins 5 and 2 with a narrow white band and between vein 2 and inner margin with a broader band

Hab. Punjab; Sikhim, Bombay; Poona; Borneo Exp 26

millun.

4992. Sylepta arctalis, Guen Delt & Pyr. p 290
Desmia opisalis, Wik Cut xvii, p 846; Led. Wien ent. Mon.
1868, pl 16, fig. 11, C & S. no. 4278

Differs from adductales in being very much more brilliantly shot with purple. Fore wing with the antemedial line inwardly defined by white. Hind wing with the discocellular spot dark; the whole postmedial line outwardly defined by white.

Hab. Bombay Presidency. Exp. 26 millim.

4993 Sylepta lactiguttalis, Warr. A M N. H (6) xvii, p 181.

Differs from luctuosals in being more shot with purple. Fore wing with the markings pure white, the subcostal postmedial patch usually smaller, the postmedial line represented by slight series of specks bent outwards between veins 5 and 2, then retracted to below angle of cell. Hind wing with the postmedial band reduced to a fine line minutely dentate and bent outwards between veins 5 and 2, then retracted to near angle of cell, sometimes obsolescent; both wings with a marginal series of pale specks, sometimes almost obsolete.

Hab. Khásıs; Nágas, Tenasserım. Exp. 28 millim.

4994. Sylepta ovialis, Wik. Cat xviii, p 638

Differs from *luctuosalis* in the makings being whiter; fore wing with the subcostal lunule smaller; hind wing with less white on the postmedial line, which is highly bent outwards between veins 5 and 4.

Hab. W. Africa; Abyssinia; Sikhim; Khásis. Exp. 30-32 millim.

4995. Sylepta luctuosalis, Guen. Delt & Pyr p 290, C & S no 4259

Botys cemeslis, Wik. Cat. xviii, p 671; C & S. no. 4272 Ebules zelleri, Brem. Lep Ost-Sib p 70, pl. 8, fig 12. Coptobasis andamanalis, Moore, P. Z S. 1877, p. 615, pl. 60, fig. 14, C & S. no. 4265.

Hymenia erebina, Butl. Ill. Het. ii, p. 57, pl. 89, fig 1.

Fuscous brown with a slight purplish tings; palpi below, pectus, and abdomen below white; fore tibis spotted with brown; abdomen

4947. Ceratarcha umbrosa, Swinh A M N H (6) xiv, p 200.

d. Ochreous brown, the wings striated with black. Fore wing with indistinct subbasal and antemedial lines, a prominent black spot in cell and larger spot at end of it, a sinuous postmedial



Fig 185.—Ceratarcha umbrosa, d

line sharply recurved along vein 2, then wider, the area beyond it much browner. Hind wing with black spot at end of cell, with prominent black irroration below it; a postmedial black line highly excurved and minutely dentate between veins 5 and 2; the outer area browner.

Both wings with marginal series of black spots and white line.

2 much more uniformly suffused with fuscous and with the markings fuscous

Hab. Sikhim; Khásis; Nágas Exp 34 millim.

Genus BOTYODES

Botyodes, Guen. Delt & Pyr p 320 (1854) Endocrossis, Meyr Trans Ent Soc 1889, p. 515.

Type, B asialis, Guen.

Range Oriental region, New Guinea

Palpi upturned and reaching vertex of head; the 2nd joint broadly rounded with scales in front, the 3rd naked, short, and blunt; maxillary palpi filiform, frons rounded; antennæ of male minutely chiated, mid tibiæ fringed on outer side with hair; hind tibiæ with tufts of hair on outer side at base and extremity; the outer spurs half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell; 7 closely approximated to 8, 9 for about one-third length Hind wing with the cell short, veins 3, 4, 5 approximated for a short distance, 6, 7 from upper angle or shortly stalked, 7 anastomosing with 8.

SECT. I. (Botyodes) Antennæ of male with four teeth on the basal joint enclosing a hollow; mid femora with a small grooved tuft at middle.

4948 Botyodes asialis, Guen Delt & Pyr p 321, Moore, Lep Ceyl. m, pl 183, figs 1, 1 a (larva), C & S no 4034.

Orange-yellow, male with the anal tuft black Fore wing with fulvous speck below median nervure near base, an oblique maculate fulvous antemedial line; a speck in cell and discocellular ocellus, an interrupted sinuous postmedial line inwardly oblique from vein 5 to 2; a highly sinuous submarginal line, with the area beyond it fulvous except at apex. Hind wing with discocellular

ocellus; a postmedial sinuous line highly bent outwards between veins 5 and 3; the marginal area fulvous with a grey tinge, narrowing to anal angle and with its inner edge sinuous, both wings with the cilis fuscous, grey at tips.



Fig. 186 — Botyodes asialis, J. 1

Larva short and thick; olive-green with reddish lateral band; small hair-bearing dorsal and sublateral and two series of larger lateral black spots; head black, the vertex yellow. Pupa green, with short and point and antennal sheath. Food-plant, Ficus.

Hab Baluchistan, throughout India, Ceylon, and Burma; Borneo. Exp. 50 millim.

4949. Botyodes principalis, Leech, Entom xxii, p 69, pl 8, fig. 9
Botyodes maculalis, Swinh. A. M. N. H. (6) xiv, p 198.

Differs from asials in being sulphur-yellow. Fore wing with the postmedial line reduced to specks, slightly sinuous and more regularly inwardly oblique; the submarginal line only represented by diffused fuscous patches on the inner side of the dark fulvous marginal area. Hind wing with dark discocellular speck; the postmedial line with its sinus dentate and with diffused fuscous patches towards costa and inner margin, a highly dentate submarginal line; a small fulvous apical patch, with fuscous patch on its inner edge; a series of dark specks close to the margin.

Hab Japan; Khásis. Exp. 44 millim

SECT. II. (Endocrossis). Antennæ of male with the basal joint normal, mid femora without the grooved tuft.

A. Hind wing of male with the inner area more or less clothed with long rough hair above and below.

4950. Botyodes flavibasalis, Moore, P Z S 1867, p 96, Felder, Rev. Nov pl 185, fig 41, C. & S no 4036

o. Orange; the tibis, palpi, collar, and two basal segments of abdomen with black spots; anal tuft pale yellow. Fore wing with basal black spot; a nearly erect antemedial black line usually interrupted at middle; a grey-brown black-edged discocallular

band; a broad vinous grey-brown marginal band sending a tooth inwards along vein 2, often conjoined to the discocellular band, and with a black line on its inner edge and traces of a fulvous line on it. Hind wing with a similar marginal band with regular inner edge and narrowing to anal angle

The rough hair on inner area of hind wing is very much more developed in specimens from Sumatra and New Guinea than in

the typical race from India and Burma.

Hab. Sikhim; Assam; Calcutta; Burma; Sumatra; New Guinea. Exp. 36 millim.

B. Hind wing of male without rough hair on inner area.

4951. Botyodes rufalis, n sp

Orange fulvous; legs whitish on outer side; anal tuft blackish. Fore wing with the basal and outer areas purplish rufous, the medial area orange-yellow, an antemedial maculate rufous line, a speck in cell and discocellular spot; a maculate postmedial line bent inwards at vein 2 to below angle of cell; the inner edge of outer area sinuous, an orange-yellow apical patch. Hind wing orange-yellow, with discocellular spot; a medial rufous line bent outwards between veins 5 and 2; the outer area purplish rufous, with slightly sinuous inner edge. Underside yellow, the outer area dull purplish, with yellow apical patch to fore wing.

Hab. Tenasserim (Doherty) Exp. 36 millim. Type in coll.

Druce.

4952. Botyodes caldusalis, Wik Cat. xvm, p. 650; C & S no. 4049.

Orange. Fore wing with the basal two-thirds of costa suffused with fulvous; an obliquely sinuous antenedial fuscous line; a speck in cell and discocellular lunule, a maculate postmedial line slightly bent outwards between veins 5 and 2, then retracted to near lower angle of cell, a curved submarginal maculate line. Hind wing with discocellular spot, the postmedial line diffused below costa, maculate and bent outwards between veins 5 and 2, then retracted to near origin of vein 2, a maculate sinuous submarginal line, cilia of both wings fuscous.

Hab. Sikhim, Assam, Burma, Java. Exp. 34 millim.

4953. Botyodes patulalis, Wik. Cat. xxxiv, p. 1405, C. & S no. 4070.

Golden yellow, palpi above, sides of frons, and shoulders black. Fore wing with the basal half of costa fuscous, a fuscous spot in cell and a large discocellular lunule; a dark submarginal sinuous line bounding a dark rufous apical patch, then running out to the margin and enclosing a small quadrate rufous patch at outer angle. Hind wing with discocellular fuscous spot; an indistinct line bounding a small apical rufous patch, and traces of a patch on yein 2.

Hab. Dharms la; Sikhim; Khásis. Exp. 40 millim.

Genus PRORODES

Provodes, Swinh A M N H (6) x1v, p 205 (1894)

Type, P. mimica, Swinh. Range N.E India, Burma

Palpi upturned, the 2nd and 3rd joints conically scaled in female, the 3rd in male broad, hollowed out, and enclosing a tuft of hair; maxillary palpi dilated with scales; from rounded, antennæ of male with the base of shaft excised, then toothed, tibiæ with the outer spurs about half the length of inner. Fore wing with veins 3, 4, 5 from angle of cell, 7 curved and approximated to 8, 9 Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle, 7 anastomosing with 8.

4954 Prorodes mimica, Swinh. A. M. N. H. (6) xiv, p. 205 Notarcha tuparalis, Warr. A. M. N. H. (6) xvii, p. 102

d. Fuscous brown, irrorated with brownish-ochreous scales. Fore wing with indistinct curved antemedial series of dark specks:



Fig 187 —Provodes mimica, &

a white speck in cell and small spots on discocallulars and below end of cell, a postmedial series of white specks, the three below costa small dentate marks, the small specks between veins 5 and 2 nearer the margin, and the two above inner margin

retracted to below angle of cell Hind wing with pale discocellular speck, a pale maculate postmedial line, highly bent outwards between veins 5 and 2 and ending near anal angle, a fine pale line at base of cilia. Underside suffused with grey

Hab Khasis; Nagas, Tenasserim Exp 34 millim

Genus SYLEPTA.

Sylepta Hubn. Verz p 356 († 1818)
Notarcha, Meyr Trans Ent Soc 1884, p 310 (preocc)
Patania, Moore, Lep Ath p 209 (1888)
Pramades, Moore, Lep Ath p 211
Pleuroptya, Meyr Trans Ent Soc 1890, p 443
Loxoscia, Warr A M N H. (6) vi, p 476 (1890)
Haritalodes, Warr A M N H (6) vi, p 476
Pardomima, Warr A M. N H (6) vi, p 477

Type, S amando, Cram., from S America.
Range. The tropical and warmer temperate zones

Paipi upturned and reaching vertex of head, the 2nd joint moderately and evenly scaled in front, the 3rd short, naked, and blunt, maxillary paipi filiform; from rounded, antenna of male chaited; tibias smoothly scaled, with the outer spurs about

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half the length of inner Fore wing with veins 3, 4, 5 from angle of cell. 7 curved and approximated to 8, 9, to which 10 also is approximated Hind wing with the cell short, vein 3 from the angle, 4, 5 somewhat approximated for a short distance, 6, 7 from upper angle

- SECT. I. (Patania) Hind tibiæ of male with a large tuft of hair and long flattened scales on inner side before the medial spurs
- 4955 Sylepta concatenalis, Will Cat xxxiv, p 1408, C & S
- d. Fuscous brown with a cupreous tinge; palpi below, pectus, legs, and abdomen below yellowish white. Fore wing with ochreous speck in end of cell; a postinedial lumilate ochreous mark expanding on the costa and extending down to vein 3; a slight ochreous mark on costa before apex. Underside with the basal half of wings pale yellowish

Hab Sikhim Exp. 30 millim.

- SECT. II Hind tibiæ of male fringed with long black hair on outer side, abdomen with paired tufts of black hair from base below, hind wing with a large tuft of black hair from inner margin near base.
- 4956 Sylepta tibialis, Moore, Lep Ath p 216, C & S no 4307.

Pale ochreous yellow, basal joint of antennæ black; fore legs marked with black; thorax spotted with black, abdomen orange, the base pale, with paired black spots on basal segments and another pair before the anal tuft. Fore wing with subbasal and antemedial bands; a medial band with pale mark on discoccillulars, and giving off an oblique line to join the submarginal band at inner margin, a marginal band continued along inner margin to the submarginal band. Hind wing with oblique medial line terminating at anal angle, an oblique submarginal band joining the marginal band, and both terminating on vein 2; both wings with the cilia fuscous with a pale line at base.

Hab Sikhim, Khásis, Nilgiris Erp 22 millim

SECT. III Hind tibiæ, abdomen, and hind wing without tufts of hair

A Antenna of male not excised at base

- 5 For e wing narrow, with the apex much produced and outer margin oblique.
- a' Hind wing with the outer margin angled at vein 2, antennæ of male with the shaft not fringed with scales
- 4957 Sylepta pronaxalıs, Will Cat vviii, p 688 Pardomima acutalıs, Hmpsn Ill Het 1x, p 171, pl 174, fig 16.
 - 3. Head and thorax ochreous and brown, abdomen fuscous

black, with a pale dorsal spot at base, the anal tuft whitish and black. Fore wing with the basal area fuscous brown, bounded by an oblique antemedial line, the medial area ochreous, a disco-cellular black-edged remform mark, a postmedial line straight from costa to vein 5, bent outwards to vein 2, and with some brown in its sinus, then retracted to lower angle of cell, the area beyond it brown. Hind wing fuscous brown, with industrict oblique medial and postmedial lines from costa to vein 2, a marginal yellow line from apex to the angle at vein 2.

Hab. Ceylon; E Pegu, Tenasserim; Borneo. Exp 26 millim.

b. Hind wing with the outer margin oblique, antennæ of male with the shaft thickened and thickly fringed with hair for a short distance near base.

4958. Sylepta obliquifascialis, n sp

Ochreous; thorax striped with brown, abdomen ringed with black, orange towards extremity, the anal tuft black and white. Fore wing with two oblique subbasal lines hardly reaching inner margin, a more prominent antemedial line, with a spot beyond it in the cell, a medial band wide at costa, narrowing to inner margin; an oblique postmedial band from costa to vein 5, where in male it touches the medial band, an oblique band given off at vein 5 from the broad marginal band and joining it again on inner margin, the marginal band running round outer angle. Hind wing with the whole area between the cell and inner margin orange, an oblique medial line, a postmedial band broad at costa, narrowing to vein 2, where it curves inwards and becomes obsolete, a marginal band expanding inwards on vein 2 and becoming obsolete.

Hab. Rangoon, Upper Burma (Watson). Exp. 24 millim.

Type in B M

4959. Sylepta chromalis, Wik Cat xxxiv, p 1453

o. Differs from obliquifascialis in the medial line of fore wing not reaching the costa and embracing a discocellular lumile; the postmedial line from costa and the line from the marginal band not oblique but parallel to the margin. Hind wing with no orange patch, the medial line embracing a discocellular spot, the postmedial straight; submarginal line from costa to vein 2, and a marginal line

Hab. Sikhim; Java Exp 30 millim.

- b. Fore wing broader, the apex not produced and the outer margin more erect.
 - a'. (Sylepta). Thorax of male with no fan of scales from origin of hind wing below.
 - a² Retinaculum of male normal.
- 4960. Sylepta chalybifascia, n sp
 - d. Pale yellow; abdomen tanged with fuscous at middle; wings

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pale glossy and semi-hyaline yellow. Fore wing with occilate antemedial mark extending from costa to inner margin, enclosing a pale centre, its edges rufous and steel-blue; a steel-blue and rufous wedge-shaped fascia on inner area from the antemedial mark to the nearly straight black submarginal line, which expands into a spot at costa and is broken near inner margin; the discocellulars and veins beyond the cell marked with rufous; a faint diffused rufous line just inside the margin, the apex blackish, with a white spot below it. Hind wing with discocellular blackish band; the inner area tinged with rufous and with three curved black bars on it, a dark submarginal line from costa to vein 2 with diffused rufous beyond it

Hab Nágas (Doherty). Exp. 22 millim. Type in B. M.

4961. Sylepta gastralis, Will Cat xxxiv, p 1356, C & S no 4305

Differs from tibialis in the fore wing having the subbasal line broken up into two spots, the pale discocellular lunule larger, the medial line angled outwards above inner margin, so that it approaches or joins the oblique line and also gives off a fascia to join the antemedial line; a brown fascia connecting the submarginal with the marginal band above middle. Hind wing with the submarginal band sending a spur inwards along vein 2 towards the medial line

Hab. Dharmedla, Sikhim, Khásis Exp 36 millim

4962. Sylepta scinisalis, Wik Cat xviii, p 648, C & S. no 4040

Botys restrictalis, Snell Trans Ent Soc 1890, p 584

d. Orange-yellow; fore tibue fuscous at extremity. Fore wing with slight fuscous spots at base and near base of inner margin; traces of an oblique sinuous antemedial line; a black spot in cell and larger discocellular spot, the outer area greyish fuscous, with slightly sinuous inner edge and small orange patch on costa near its inner edge. Hind wing with the basal half orange, with black discocellular spot, the outer half greyish fuscous

The form restrictalis from Sikhim has the basal area of both

wings fuscous

Hab. N.W. Himalayas; Sikhim, Khásis, Moulmein millim

4963. Sylepta costalis, Moore, Lep Atk p. 221; C & S no. 4035

d. Head, thorax, and abdomen ochreous, more or less suffused with fuscous, fore tibiæ fuscous at extremity. Fore wing ochreous; the basal area more or less suffused with fuscous as far as the obliquely sinuous antemedial line, or in the typical form the whole inner area suffused with fuscous to the marginal band, leaving an ochreous fascia along costa only; a spot in cell and larger discocellular spot, the postmedial line slightly excurved between veins

5 and 3, and with the whole area beyond it fuscous except an ochreous streak on costa. Hind wing ochreous, the basal area below the cell fuscous, a discocellular lunule, the outer half of wing fuscous with sinuous inner edge, or in the typical form the whole wing is fuscous, obscuring the markings

Hab Sikhim; Khásis. Exp. 38 millim.

4964 Sylepta sellalis, Guen Delt. & Pyr. p 330, C & S no. 4169.
Botys consimilalis, Led Wien ent Mon 1863, p 471
Botys disjunctalis, Wlk. Char Undescr Het p 96; C & S. no 4040 (part)
Botys sciniscalis, Moore, P Z S 1877, pl 60, fig 11 (nec Wlk).

Differs from costales in the head, thorax, abdomen, and base of fore wing not being suffused with fuscous; the last with the antemedial line curved, the postmedial line bent outwards between



Fig 188 - Sylepta sellalis, of

veins 5 and 2, enclosing an ochreous patch in its sinus below vein 2 and with a costal patch beyond it extending down to vein 6. Hind wing with no fuscous on basal inner area, the discocellular spot larger; the outer fuscous area with some diffused ochreous near its inner edge from vein 5 to inner margin and also on the outer margin

Hab Sikhim, Khásis; Burma, Andamans, Perak, Ternate;

Amboina Eap. 40 millim.

4965. Sylepta bipunctalis, Warr P Z S 1888, p 838, C. & S.

of Differs from costales in being paler, head, thorax, and abdomen more or less suffused with fuscous. Fore wing with the basal and almost the whole inner area suffused with pale fuscous, extending round the lower angle of cell beyond the discocellulars; the postmedial line less bent inwards along vein 3. Hind wing with the basal inner area slightly tinged with fuscous; the discocellular spot larger; the postmedial line outlined with pale suffusion.

2 paler, with more pale suffusion beyond the postmedial line of fore wing on costal and inner areas and a broad band of it on

hind wing

Hab. Dharmsála; Thandiáni. Exp. 34-36 millim.

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4966. Sylepta verecunda, Warr A M N H (6) xviii, p 167.
Botyodes fraterna, Moore, Lep Ath p. 221, pl 7, fig 16 (præccc);
C & S no 4037

Differs from bipunctalis in being more otherous. Fore wing with hardly any fuscous suffusion on basal and inner areas, the spots in cell and on discocellulars reduced. Hind wing with the outer area uniform fuscous, its inner edge almost straight and only slightly indented at vein 5.

Hab N.W Himalayas; Sikhim, Khásis; Nilgiris; Ceylon

Exp 28 millim.

4967 Sylepta angustalis, Snell Trans Ent Soc. 1890, p 585

Fulvous yellow, palpi black at sides, white below; male with the anal tuft black. Fore wing with the basal area suffused with fuscous to the postmedial line, an obliquely sinuous fuscous antemedial line; a spot in cell and discocellular lunule, the postmedial line minutely dentate, slightly bent outwards between veins 5 and 2, then retracted to lower angle of cell, and expanding into a spot above vein 1, the outer area fuscous, expanding inwards to the postmedial line above vein 5 and again expanding on the inner margin. Hind wing with discocellular spot, a minutely dentate postmedial line highly bent outwards between veins 5 and 2, the outer area fuscous, narrowing at middle.

Hab Sikhim, Khásis. Exp 30 millim.

4968. Sylepta sabinusalis, Wik Cat. xviii, p 708
Botys imbutalis, Wik Cat xxxiv, p 1442
Botys sublituralis, Wik Cat xxxiv, p 1452, C & S no 4076
Notarcha butyrina, Meyi Trans. Ent. Soc. 1886, p 260.
Botys ruralis, Snell Trans. Ent. Soc. 1890, p 588 (nec. Scop.).
Notarcha dubia, Hmpsn Ill Het. viii, p. 136, pl 155, fig. 16

Ochreous with a slight fuscous tinge. Fore wing with outwardly oblique sinuous antemedial fuscous line; a speck in cell and discocellular lunule, the postmedial line nearly straight from costa to vein 5, then bent outwards and minutely dentate to vein 2, along which it is retracted nearly to the cell. Hind wing with discocellular spot; a postmedial line highly bent outwards and minutely dentate between veins 5 and 2, the marginal area slightly suffused with fuscous

Specimens from the Khási Hills are more fuscous in tone Hab. N.W. and E. Himalayas; Khásis, Karáchi, Bombay; Nilgiris; Ceylon; Borneo, Java; Celebes; Sumbawa, New Britain; Solomons, Fiji. Exp. 32-36 millim.

4969 Sylepta ultimalis, Wlk Cat xviii, p 659, Hmpsn Ill Het ix, pl 172, fig. 8, C & S no 4105

Ohve-grey. Fore wing with the costa slightly ochreous; traces of a spot in cell and another on discocellulars, an indistinct post-medial line excurved from costa to vein 2, then retracted to angle of cell and slightly excurved again. Hind wing with traces of disco-

cellular spot and postmedial line highly bent outwards between veins 5 and 2

Hab. Ceylon, Rangoon. Exp. 32 millim.

4970. Sylepta multilinealis, Guen. Dek. & Pyr. p. 387, pl. 8, fig. 11, C & S no. 4306
Zebronia salomealis, Wik Cat xvii, p. 476
Botys otysalis, Wik Cat xviii, p. 723
Botys annuligeralis, Wik Cat xxxiv, p. 1424
Botys basipunctalis, Brem. Lep. Ost-Sib p. 68, pl. 6, fig. 8.

Yellowish white; the head and thorax spotted with black and brown, abdomen with segmental brown rings, a pair of black spots or dorsal band on 2nd segment and one or two black spots towards extremity. Fore wing with two subbasal series of blackbrown spots often developed into lines; an oblique antemedial line; an annulus in cell and smaller one below it, a large remform discocellular mark; a postmedial sinuous line highly bent outwards between veins 5 and 2, and usually with a line across its sinus; the veins of outer area streaked with brown, a minutely dentate submarginal line slightly angled on vein 2; a marginal line. Hind wing with discocellular annulus touching an oblique minutely dentate antemedial line; a sinuous postmedial line, highly excurved and dentate between veins 5 and 2, its sinus crossed by a dentate line, a minutely dentate submarginal line bent outwards to anal angle, a marginal line.

The Sikhim race has the markings very dark.

Hab W. Africa; E Siberia; Japan; China; throughout India, Ceylon, and Burma; the Malayan subregion and Australian region. Exp. 28-40 millim.

4971. Sylepta iopasalis, Wik Cat xvm, p 652. Moore, Lep Ceyl.

111, pl 182, fig 14, C & S no 4095
Botys plagnatalis, Wik Cat. xvm, p 673, C & S. no. 4101.
Botys botsralis, Wik Cat xvm, p 716
Botys orobenalis, Snell Tyd. v Ent xxm, p 211, & xxv, p 180, pl. 7, fig 7.
Botys tardalis, Snell Tyd v Ent. xxm, p 210, & xxv, p 180, pl 7, fig. 6
Botyodes leopardalis, Moore, Lep Atk. p 221, pl 7, fig. 26;
C & S no 4039
Notarcha tennis, Warr. A. M N. H. (6) xvi, p 102

Bright ochreous; the head and thorax suffused with purplish fuscous; palpi purplish fuscous towards extremity, abdomen with a pair of lateral fuscous spots on 3rd segment, and black dorsal line on penultimate segment. Fore wing with subbasal and oblique antemedial fuscous lines, the area between them more or less suffused with purplish fuscous; a speck in cell and discocellular annulus filled in with fuscous, the postmedial line straight from costa to vein 5, bent outwards and minutely dentate from veins 5 to 2, then retracted to near lower angle of cell and sinuous to inner margin, the area beyond it suffused with purplish fuscous,

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usually leaving patches of ochreous on apical area and below middle, a marginal series of specks. Hind wing with discocellular spot; a postmedial line highly bent outwards and minutely dentate between veins 5 and 2, then continued to anal angle as two diffused bands, the apical area suffused with purplish fuscous; a more or less complete marginal series of specks

Plagatalis, which is probably the dry-season form, is smaller with all the dark markings reduced, fore wing with the bent-out portion of the postmedial line reduced to specks and small dark

marks beyond it below apex and above inner margin.

Hab Formosa; Sikhim; Assam; Karáchi; Nilgiris; Ceylon; Burma; Andamans; Borneo, Amboina, Sumbawa; Timor Laut, Australia Exp: plagiatalis, 24; iopasalis, 26-36 millim

4972 Sylepta mysisalis, Will Cat xviii, p 634. Gadessa impuralis, Warr A M N H (6) xviii, p 167.

Pale ochreous Fore wing with oblique sinuous antemedial fuscous line, a spot in cell and discocellular lunule, the postmedial line excurved between veins 5 and 3, then retracted to below angle of cell and sinuous to inner margin; a marginal fuscous band narrowing to outer angle Hind wing with discocellular spot, the postmedial line highly bent outwards between veins 5 and 2; a marginal fuscous band slightly widest at apex.

Hab W Africa, Khásis, Nilgiris Exp 26 millim.

4973 Sylepta venustalis, Swinh A M N H (6) xiv, p 199

3. Differs from aurantiacalis in being orange. Fore wing with the spot in cell, the ante- and postmedial lines, hind wing with the discocellular spot and postmedial line, stronger and blacker; no fuscous on outer area except at apex of hind wing, a series of marginal fuscous specks and the cilia fuscous.

Hab. Khásis. Exp 40 millim.

4974 Sylepta nigriflava, Swinh A M N H. (6) xiv, p 199

o. Differs from aurantiacalis in being orange Fore wing with no spot in cell, the discocellular spot of both wings, the antemedial line of fore wing, and postmedial line of both wings blacker; the outer area and margin unmarked.

Hab. Sikhim, Khásis Exp. 30 millim.

4975. Sylepta dissipatalis, Led. Wien ent. Mon 1863, p 474, pl 11, fig 13
Samea quinquigera, Moore, Lep Atk p 207, pl 7, fig 14; C & S no 4249

Fuscous brown with a cupreous tange, the collar and basal segment of abdomen whitish; some white before the anal tuft Fore wing with curved antemedial line, a diffused yellowish-white patch inside it below the cell, a quadrate spot in end of cell; the postmedial line slightly bent outwards between veins 5 and 2, then retracted to near the angle of cell, a large yellowish-

white patch inside it from the costs to vein 2, a small spot beyond it below the costa and small spots inside and beyond it between the cell and inner margin Hind wing with the basal area yellowish white, a dark-edged remform discocellular spot, the postmedial line nearly straight from costs to vein 2, then retracted to near angle of cell and conjoined to the marginal brown area near anal angle, a narrow ochreous band beyond it from costs to vein 2 and from vein 2 to near anal angle, cilia whitish towards outer angle of fore wing and on greater part of hind wing

Hab. Sikhim, Khasis, Ceylon, Tenasserim Exp 28 milling

4976. Sylepta quadrimaculalis, Koll Hug Kaschm iv, p 492, Led Wien ent Mon 1863, pl 16, fig 12 Nagia desmialis, Wik Cat xxxiv, p 1320 Coptobasis quadrimaculalis, C & S po. 4274 (nec Brem & Grey)

Fuscous brown, palpi below, pectus, legs, and abdomen below white Fore wing with traces of oblique antemedial line, and of two dark specks in cell with a pale speck between them, a whitish patch beyond the cell from vein 7 to 3, its lower part expanded outwards and dentate, its outer edge bounded by the obscure postmedial line, which is retracted below the patch to origin of vein 2 Hind wing with large whitish patch beyond the cell, its outer edge dentate on vein 4, cilia whitish towards outer angle of fore wing and anal angle of hind wing. Underside suffused with greyish white

Hab Japan, N.W. Himalayas, Sikhim; Khasis; Borneo

Exp. 38 millim.

4977. Sylepta subalbidalis, Swah A M N H. (6) xiv, p 201.

d. Uniform smoky black, legs and abdomen below whitish; wings with slight purplish reflections, an indistinct discocellular dark spot, an indistinct postmedial line bent outwards and minutely dentate between veins 5 and 2, then retracted to below angle of cell. Underside suffused with grey, fore wing with dark spots in cell and on discocellulars, the postmedial line prominent, expanding into dark spots below veins 6 and 2 of hind wing

Hab. Khásis. Exp 26 millim

4978. Sylepta ogoalis, Wlk Cat xviii, p 689 Coptobasis colomboensis, Moore, Lep Ceyl in, p 556, pl. 215, ing 13, C & S no 4266

d. Fuscous with a purple gloss; head with slight rufous tinge, palpi white below at base. Fore wing with obliquely curved antemedial black line, a speck in cell and discocellular spot, the postmedial line nearly straight from costs to vein 2, then retracted to near angle of cell and outwardly oblique to inner margin Hind wing with faint traces of discocellular spot and curved medial line Underside pale

Hab Ceylon; Borneo Exp 26 millim

4979. Sylepta deficiens, Moore, Lep. Ceyl 111, p 556, pl. 215, fig 12; C & S no 4269

Fuscous brown, palpi white below, underside of thorax and abdomen white, wings of a silky texture. Fore wing with an obliquely curved antemedial line; a speck in cell and discocellular lunule, a postmedial minutely waved line with large ochreous white lunule on it below costa and bent inwards along vein 2. Hind wing with discocellular speck; an indistinct postmedial line bent outwards between veins 5 and 2 and obscurely outlined with whitish

Hab Dharmsála; Sikhim, Ceylon Exp. 26 millim.

- b². Retinaculum of male formed by a fan of large white scales.
- 4980. Sylepta paucistrialis, Warr A. M N. H (6) xvii, p 139.
- d. Pale ochreous Fore wing with the base of costa narrowly black, a fuscous antemedial spot on inner margin, a discocellular spot, a postmedial line extremely and very irregularly dentate from vein 6 to inner margin, some of the dentitions nearly reaching outer margin. Hind wing whitish, with a fuscous postmedial line between veins 6 and 2 and a slight marginal line

Hab. Bhután; Khásis. Exp. 20 millim

- b. (Pleuroptya) Thorax of male with a fan of large scales from origin of hind wing below
- 4981. Sylepta aurantiacalis, Fisch v Rostl Schmett p 213, pl. 75, ig. 3

 Botys crocealis, Dup. Lép Fr viii, pt. 2, p 365, pl 235, fig. 6

 Botys aures, Butl Ill Het. 111, p 76, pl 59, fig 12, C. & S. no 4046

Hapaba fraterna, *Moore*, *Lep Ceyl* m, p. 338, pl 183, fig. 9; C & S no 4093.

Ochreous with a fulvous tinge, palpi fulvous, white below. Fore wing with obliquely sinuous antemedial fuscous line; a spot in cell and discocellular lunule; the postmedial line straight from costs to vein 5, bent outwards and minutely dentate between veins 5 and 2, then recurved to origin of vein 3 and sinuous to inner margin; a more or less prominent marginal fuscous band, broad at apex, narrowing to near outer angle, where it expands into a patch. Hind wing with discocellular speck; a postmedial line highly bent outwards between veins 5 and 2; a marginal band, broad at apex, then narrowing and becoming maculate. Thorax with the fan of scales pale.

Hab. S. Europe, Japan; China, throughout India, Ceylon,

and Burma. Exp. 34-36 millim.

- 4982. Sylepta pernitescens, Swinh A M N. H (6) xiv, p 203. Pleuroptya fuscalis, Warr. A. M N. H (6) xvii, p 165
- o. Differs from sabinusalis in being darker, with a slight fulvous vol. iv.

tinge and suffused with fuscous; fore wing with the lines darker, the postmedial line more bent outwards between veins 5 and 2, the outer margin broadly fuscous, tapering to anal angle of hind wing. Thorax with the fan of scales bright ochreous.

Hab. Japan, Khásis. Exp 36 milhm.

B. (Pramadea) Antennæ of male with a tooth of scales from upperside of basal joint, the shaft excised at base.

4983. Sylepta denticulata, Moore, Lep Ath p. 211; C & S no 4488

Grey brown suffused with fuscous; palpi white below; fore tibus spotted with black, abdomen with slight pale rings and black dorsal marks towards extremity. Fore wing with indistinct pale curved antemedial line slightly defined with black, a pale black-ringed speck in cell and discocellular lumile; a postmedial indistinct minutely dentate pale line, excurved between veins 5 and 2, slightly defined by black, and with a black band on its inner side from vein 2 to inner margin. Hind wing with black-ringed pale discocellular speck, a minutely dentate pale postmedial line slightly defined with black and much bent outwards between veins 5 and 2, traces of a waved grey submarginal line, both wings with the culia black-spotted.

Some specimens are much more uniform grey-brown without any fuscous suffusion and the markings very faintly defined with

black

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Hab Sikhim; Khásis, Nágas. Exp. 34 millim.

4984 Sylepta carbatinalis, Swith Trans Ent Soc. 1890, p. 288, pl. 8, fig 13
Polycorys seminigralis, Warr A. M. N. H. (6) xviii, p. 172.

Q. Fuscous brown Fore wing with obscure sinuous antemedial line, an annulus in cell and discocellular lunule, a postmedial minutely dentate line with pale lunules on it, straight from costs to vein 2, then retracted to below angle of cell. Hind wing with pale discocellular speck, a minutely dentate postmedial line with pale lunules on it excurved between veins 5 and 2; both wings with pale line at base of cilia. Underside suffused with greyish.

d suffused with ochreous; fore wing with pale speck in cell and lunule at end of it; both wings with diffused ochreous on

inner side of the dentate postmedial line

Hab. Nágas; Rangoon. Exp 32 milim.

4985 Sylepta cohessalis, Wlk. Cat xxxiv, p 1418. Notarcha halurga, Meyr. Trans Ent Soc 1886, p 259 Coptobasis subenescens, Warr A. M. N. H. (6) xvii, p. 188

Dark fuscous with slight purplish reflections. Fore wing with curved antemedial line, a speck in cell and discoccillular annulus; hind wing with obscure discoccillular line, both wings with the

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postmedial line straight from costs to vein 2, then retracted to lower angle of cell

Hab. Khásis, Nilgiris, Sula, Celebes; Australia; Fiji Exp. 30 millim.

4986. Sylepta crotonalis, Wlk Cat. xix, p 997, C. & S no 4267

Fuscous with slight tinge of rufous and purple Fore wing with obliquely sinuous antemedial black line, a small annulus in cell; a discoccilular lunule, a dentate postmedial line nearly straight from costa to vein 2, then retracted to below angle of cell Hind wing with obscure dark discoccilular mark, a postmedial dentate line slightly excurved between veins 5 and 2 Underside suffused with grey

The male has the tuft of hair on basal joint of antennæ large. Hab Sikhim; Khásis, Ceylon Exp 32 millim

4987. Sylepta fraterna, Moore, Lep Ceyl m, p 292, pl. 181, fig. 8; C & S no 4270

Differs from crotonalis in being much darker fuscous; fore wing with the annulus in cell reduced to a speck; the discocellular lunule small; the postmedial line minutely dentate and more excurved between veins 5 and 2.

Hab Nilgiris, Ceylon. Exp. 28 millim.

4988 Sylepta ridopalis, Swinh Trans Ent. Soc 1892, p. 18

Differs from crotonalis in the tuft on basal joint of antennæ of male being small; the colour greyer fuscous. Fore wing with white-centred speck in cell and discocellular lunule; the postmedial line of both wings slightly defined by pale colour, hind wing with the cilia white-tipped. Underside with whitish suffusion.

Hab. Khásis, E Pegu, Tenasserim Exp. 30 millim.

4989. Sylepta lunalis, Guen Delt & Pyr p 352, C. & S. no 4271. Botys thyasalis, Wlk Cat xviii, p 734 Coptobasis incrassata, Wari. A M N H (6) xviii, p. 171

Differs from ridopalis in the postmedial line of neither wing being minutely dentate. Underside with slight greyish suffusion; abdomen with slight segmental dorsal white bands towards extremity.

Hab. Formosa; throughout India, Ceylon, and Burma; Andamans; Borneo, Celebes, Sumbawa. Exp. 30 millim.

4990. Sylepta adductalis, Wil. Cat xvni, p 669, C & S no. 4263 Coptobasis luminalis, Led Wien ent Mon 1863, p 482 pl. 16, fig 10

Differs from lunalis in the postmedial line of both wings having a white lunule on it from below costs to vein 5 and a white spot or slight pale outline below vein 2 of fore wing

Hab. Nilgiris; Ceylon; Java Exp. 22-30 millim

4991. Sylepta textalis, Led Wien ent. Mon. 1863, p. 482, pl. 16, fig 9, C & S. no. 4275 Coptobasis sensalis, Swanh P Z S 1885, p. 867, C & S no 4264.

Differs from adductalis in the antemedial line of fore wing being inwardly defined by white; hind wing with the basal area pale; both wings with the white mark beyond the postmedial line from below costs to vein 5 larger, the part of the line between veins 5 and 2 with a narrow white band and between vein 2 and inner margin with a broader band.

Hab. Punjab; Sikhim, Bombay; Poona; Borneo Exp 28

millum.

4992. Sylepta arctalis, Guen Delt & Pyr. p 290

Desmia opisalis, Wik Cat xvii, p 346, Led. Wien ent. Mon. 1868, pl 16, fig. 11, C & S no. 4278

Differs from adductals in being very much more brilliantly shot with purple. Fore wing with the antemedial line inwardly defined by white. Hind wing with the discocellular spot dark, the whole postmedial line outwardly defined by white

Hab. Bombay Presidency. Exp. 26 millim.

4993, Sylepta lactiguttalis, Warr A M. N. H (6) xvii, p 181.

Differs from luctuosalss in being more shot with purple. Fore wing with the markings pure white; the subcostal postmedial patch usually smaller, the postmedial line represented by slight series of specks bent outwards between veins 5 and 2, then retracted to below angle of cell. Hind wing with the postmedial band reduced to a fine line minutely dentate and bent outwards between veins 5 and 2, then retracted to near angle of cell, sometimes obsolescent, both wings with a marginal series of pale specks, sometimes almost obsolete.

Hab. Khásis; Nágas; Tenasserim. Exp. 28 millim.

4994. Sylepta ovialis, Wik. Cat xvm, p 636

Differs from *luctuosalis* in the makings being whiter; fore wing with the subcostal lunule smaller; hind wing with less white on the postmedial line, which is highly bent outwards between veins 5 and 4.

Hab. W. Africa; Abyssmia; Sıkhım; Khásis Emp. 30-32

millim.

4995. Sylepta luctuosalis, Guen Delt & Pyr. p. 290, C. & S. no 4259.

Botys cemeals, Wile. Cat. xviii, p. 671; C. & S. no. 4272. Ebulea zelleri, Brem. Lep. Ost-Sib. p 70, pl. 8, fig. 12. Coptobasis andamanalis, Moore, P Z. S 1877, p 615, pl. 60, fig. 14,

C & S. no. 4265. Hymenia erebina, Butl. III. Het. ii, p. 57, pl. 39, fig 1.

Fuscous brown with a slight purplish tinge; palpi below, pectus, and abdomen below white; fore tibis spotted with brown; abdomen

with segmental ochreous rings. Fore wing with obscure straight antemedial ochreous line, a dark spot in cell, with ochreous spot on its inner side and quadrate spot beyond it; a discocellular dark lunule defined by an ochreous line on its outer side, a large ochreous lunule with minutely dentate outer edge on the postmedial line from costa to vein 5 and a spot on the sinus below vein 2; chia whitish towards outer angle. Hind wing with dark discocellular spot, the postmedial line with a large ochreous patch on its outer side from costa to vein 2, and a narrowing band on the retracted portion between vein 2 and inner margin, cilia white at tips

The Siberian, Japanese, and Chinese race zelleri has the mark-

ings whitish.

Hab. Siberia, Japan; China, N.W. and E Himalayas; Andamans; Borneo Exp. 22-30 millim

Genus LYGROPIA

Lygropia, Led Wien ent Mon 1863, p 381 Haritala, Moore, Lep Ceyl III, p 311 (1886) Pardomima, Warr A M N H (6) vi, p 477 (1890) Hyperthalia, Warr A. M N H (6) xvii, p 134 (1896) Metoeca, Warr. A M N H (6) xvii, p 145

Type, L unicoloralis, Guen, from S America Range The tropical and warmer temperate zones.

Palpi upturned, the 2nd joint evenly fringed with scales in front, the 3rd short, blunt, and naked, maxillary palpi filiform; frons rounded, antennæ of male ciliated, the outer medial spur of hind tibiæ about half the length of inner. Fore wing short and broad; veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is closely approximated. Hind wing with the cell short; veins 3, 4, 5 from the angle; 6, 7 from upper angle, 7 anastomosing with 8.

- SECT. I (Hyperthalia) Hind wing of male with vesicular hollow on inner area and tuft of long hair on inner margin.
- 4996 Lygropia flavicaput, Warr A M N H. (6) xvii, p 134.
- d. Head yellow; palpi with the 2nd joint fuscous; thorax pale brown; abdomen whitish. Fore wing uniform pale redbrown, with traces of a dark mark on costa beyond middle. Hind wing whitish with slight fuscous suffusion.

Hab. Khásis Exp. 20 millim.

- SECT. II (Lygropia). Hind wing of male without tuft and vesicle on inner area
- 4997 Lygropia obrinusalis, Wll. Cat xviii, p 549, Hmpsn Ill Het.
 viii, pl 156, fig 3, C & S no 4324
 Botys trigalis, Led Wien. ent Mon 1863, p 375, pl 10 fig 18

Haritala graphicalis, Swinh P Z S 1886, p 459, C & S. no. 4822

Bright orange-yellow, pain with the 3rd joint black, fore time and tarm spotted with black. Fore wing with subbasal, antemedial, and postmedial black spets on costs and large discocillular spot; indistinct sinuous ante- and postmedial orange lines, the latter slightly bent autwards between veins 5 and 2, then retracted to lower angle of cell, an indistinct curved minutely waved submarginal line. Hind wing with subbasal orange line, a discocillular spot; minutely dentate postmedial and submarginal lines, the former, bent outwards, from years, 5 to 2, where it meets a projection from the latter.

Hab. Sunda; Khlu, Punjab; Mhow; Nilgiris, Nicobars;

Borneo, Ambaina. Evp. 24 millim.

4998. Lygrapis quaternalis. Zell. K Vet-Al. Handl. 1852, p. 44.

Botys tameratalis, Zell. R. Vet-Ak. Handl. 1852, p. 45

Zebronis cassassin, Wik Cat xvii, p. 477, & & S no 4820

Zebronis aurolinealis, Wik Cat xvii, p. 478

Botys faustalis, Led Wien ent Mon 1863, p. 375, pl. 10, fig. 15.

Notarcha chrysoplasta, Meyr Trans Ent Soc 1884, p. 311

Hantala delicatalis, Hmpsn Ill Het viii, p. 137, pl. 155, fig. 5.

Differs from obrinusalis in the head, thorax, and abdomen

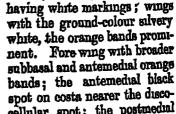


Fig 189 —Lygropia quaternalis, d

Fig 189—Lygropia quaternalis, of t cellular spot; the postmedial line more excurved from costs to vein 2. Hind wing with the orange bands broader: the postmedial line more excurved between

veins 5 and 2.

Hab W. and S Africa; throughout India, Ceylon, and Burma;

Australia Exp 20 millm.

4999. Lygropia amplificata, Warr A M N. H (6) xvii, p. 145.

d. Head and thorax ochreous marked with fuscous, palpi with black spot at end of 2nd joint; abdomen orange, the terminal segment with black spot at base followed by brown and white rings. Fore wing ochreous suffused with fuscous, leaving patches of ochreous on basal and costal areas and on the postmedial line; black costal spots at base and on the sinuous antemedial line; black spots in cell and on discoccillulars, both wings with a postmedial minutely dentate line arising from a black spot on costa of fore wing straight to vein 2, then retracted to lower angle of cell, a marginal series of specks.

Hab. Khisis. Exp. 22 millim.

LYGROPIA 343

5000. Lygropia euryclealis, Wlk Cat xviii, p. 651; C & S no 4056.

Ochreous yellow; head and collar dull fulvous brown Fore wing with the costal and outer areas fulvous brown, the latter expanding at outer angle, an obliquely sinuous antemedial brown line, a speck in cell and discocellular lunule, a minutely waved postmedial line bent outwards between veins 5 and 2, then retracted to below angle of cell Hind wing with discocellular speck, a medial line very much bent outwards between veins 5 and 2 and dentate on those veins; a dull fulvous marginal band, broad at costa, tapering to analangle, chia of both wings grey-brown. Hab. Sikhim, Moulmein, Flores Exp. 3 26, 2 28 millim.

5001 Lygropia distorta, *Moore*, *Lep Ceyl* m, p 270, pl 180, fig 7; C & S no 4340

Differs from amyntusalis in being brighter yellow, the abdomen dark orange fulvous except the first two segments, the anal segment blackish with white basal ring and lateral stripes. Fore wing with a linear spot in cell almost joined to the antemedial line; the marginal dark area broader and with no pale patch beyond the excurved part of postmedial line. Hind wing with the excurved part of the postmedial line between veins 5 and 2 straight, oblique, and sharply defined, the dark areas at apex and anal angle more extensive, a fine marginal line between veins 5 and 2

Hab. Sikhim, Nilgiris, Ceylon Eap 30 millim

5002 Lygropia amyntusalis, Wlk Cat xviii, p 662; Moore, Lep.

Ceyl iii, pl 178, fig 12, C & S no 4339

Asopia crithersalis, Wlk Cat xix, p 939

Botys semizebralis, Wlk Cat xxxiv, p 1407

Botys plagiferalis, Wlk Cat xxxiv, p 1452

Glyphodes testudinalis, Saalm Ber Senchenberg naturforsch Ges.

1880, p 297

Bright ochreous yellow, head and thorax slightly marked with brown, abdomen with paired brown spots on 2nd segment and dorsal patch on anal segment Fore wing with two semicircular brown annuli on base of costa, the 2nd with a more or less complete line from it to inner margin, an antemedial oblique brown line forking towards the costa, and met at inner margin by an outwardly oblique line from the large brown-edged discocellular reniform mark, a postmedial brown line bent outwards and minutely waved between veins 5 and 2, joined at inner margin by a more or less complete oblique streak from the discocellular mark, and conjoined at vein 5 to the large apical brown patch and at inner margin to a patch at outer angle Hind wing with oblique antemedial line arising from a discocellular annulus; a postmedial line bent outwards at vein 5 and terminating on the outer margin near anal angle, an apical brown patch and a marginal line

Hab Throughout India, Ceylon, and Burma, Andamans, Java.

Exp. 26 millim

5003. Lygropia flavispila, Swinh A M. N H. (6) xiv, p. 204

d. Sericeous brown; palpi at base, thorax, and abdomen below pale; both wings with broad ochreous white discocollular band with sinuous edges.

Hab. Khasis. Exp. 24 millim.

5004 Lygropia poltisalis, Wik Cat xviii, p 714 Samea yerburn, Butl. P Z S 1886, p 383, pl 35, fig 6, C. & S no 4252 Hapalia oblita, Moore, Lep. Atk p 222, C & S no 4100 Notarcha semifiava, Wair. A M N H (6) xviii, p 166

Fuscous brown, palpi white below at base. Fore wing with outwardly oblique sinuous antemedial line; an annulus in cell and large discocellular spot with ochreous line on it, a dentate postmedial line slightly outlined with ochreous, retracted at vein 3 to below end of cell, then sinuous to inner margin; an ochreous spot in end of cell and patch beyond the discocellular mark, or sometimes the whole medial area suffused with ochreous. Hind wing with discocellular annulus, with an ochreous spot before it and patch beyond it; a dentate postmedial line outlined with ochreous, retracted along vein 3 to the cell, then sinuous to inner margin; both wings with the veins of the outer dark area slightly streaked with ochreous

The form yerburu from the NW. Himalayas is much paler than typical politicalis from the Khasis and Borneo, which has the markings black-brown, oblita from Sikhim is intermediate.

Hab. Murree, Dalhousie, Dharmsála; Sikhim; Khásis; Borneo. Exp. 36 millim.

Genus AGATHODES.

Agathodes, Guen. Delt & Pyr p 207 (1854). Stenurges, Led Wien ent Mon 1863, p 416

Type, A. ostentalis, Geyer.

Range. Neotropical and Ethiopian regions; India, Ceylon, and

Burma, Malayan subregion to Sumbawa.

Palpi upturned and hardly reaching vertex of head, the 2nd joint broadly scaled in front, the 3rd porrect and lying on the hair of 2nd joint; maxillary palpi triangularly scaled; from flat; antennæ of male nearly simple, mid and hind tibiæ clothed with spinous hair on outer side, the outer spurs less than half the length of the inner, abdomen long; male with lateral anal tufts and the claspers and anal tuft extremely developed. Fore wing very long and narrow, the apex produced and outer margin oblique; veins 3, 4, 5 from lower angle of cell, 7 approximated to 8, 9 for about one-third length, 10 also approximated to 8, 9. Hind wing with the cell long; vein 3 from angle, 4, 5 approximated for a short distance, 6,7 from upper angle, 7 anastomosing with 8.

5005. Agathodes ostentalis, Hubn Zutr figs 833, 834, Moore, Lep. Ceyl m, pl 215, fig 10, C & S no 4282

Pale fawn-colour; head and thorax marked with white; abdomen ringed with white and suffused with fuscous on dorsum

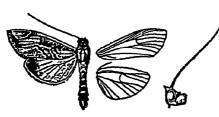


Fig 190 — Agathodes ostentalis, of

except at base, the anal tuft blackish. Fore wing with the costa white; a discocellular white lunule; a broad oblique medial pink band with whitish edges from cell to inner margin, then curved outwards and continued as a diffused patch to near middle of

outer margin, a large semicircular white-edged apical mark, caliapink. Hind wing ochreous

Hab. Throughout India, Ceylon, and Burma, Andamans; Java; Sumbawa. Exp 26-40 millim.

5006. Agathodes modicalis, Guen Delt & Pyr p 210 Megaphysa integralis, Wik Cat. xxxiv, p 1529

Differs from ostentalis in being dark brown; abdomen with white dorsal tuft at base, the 2nd segment chestnut, the 3rd, 4th, and terminal segment fuscous. Fore wing with the part of the medial band below the cell chestnut, the dentate patch beyond the cell pale brown with chestnut on the costa above it, the cilia dark brown. Hind wing brown

Hab. Tenasserim, Java Exp. 46 millim.

Genus GLYPHODES.

Glyphodes, Guen Delt & Pyr p 292 (1854)
Margaroma, Hubn Verz p. 358 (? 1818), non descr
Eudioptis, Hubn Verz p. 359
Parotis, Hubn Samml exot Schmett in, p 30 (1825), non descr
Phakellura, Lands Guild. MS, Westw Intr Mod. Class Ins ii,
p 401 (1840), non descr
Margarodes, Guen Delt & Pyr p 301 (1854), præocc
Dysallacta, Led Wien ent Mon 1863, p 393
Sisyrophora, Led Wien ent Mon 1863, p 399
Enchocnemidia, Led Wien ent Mon 1863, p 399
Pachyarches, Led Wien ent Mon 1863, p 398
Chloauges, Led Wien ent Mon 1863, p 405
Cadarena, Moore, Lep Ceyl in, p 335 (1886).
Pitama, Moore, Lep. Atk p 217 (1888)
Cenocnemis, Warr A. M. N. H (6) xviii, p 116 (1896).

Type, G stolahs, Guen

Range. The tropical and warmer temperate zones

Palpi upturned, the 2nd joint broadly scaled in front, the 3rd porrect and lying along the hair on the 2nd joint, maxillary palpi triangularly scaled, frons rounded; antennæ of male nearly

simple, tibize with the outer spurs less than half the length of inner; male with the anal tuft large. Fore wing with the costa highly arched towards apex; veins 3, 4, 5 from angle of cell, 7 closely approximated to 8, 9 for nearly half its length, 10 also approximated to 8, 9. Hind wing with vein 3 from angle of cell; 4, 5 closely approximated for a short distance, the discocallulars slightly angled and nearly erect; 6, 7 from upper angle or shortly stalked, 7 anastomosing with 8.

- SECT. I. (Susyrophora) Antennee of male with the basal joint dilated, a small tooth at base of inner side of shaft, which is contorted but not thickened, hind tibes fringed with hair on outer side and with a tuft on inner side near the medial spurs.
- 5007. Glyphodes pfeisffers, Led Wien ent Mon. 1863, p. 399, pl. 13, fig 13, C & S no 4216 Cydelma elwesialis, Snell Trans. Ent. Soc 1890, p. 607, pl xix, figs 1, 1 a
- o. Differs from laticostalis in the thorax and abdomen being suffused with cupreous brown; anal tuft black. Fore wing much shorter and less produced at apex; the costal band not so broad and less regular; a dark-edged white lunule on discocellulars. Hind wing with a fuscous discocellular line; both wings with a prominent silvery marginal band with slight fuscous suffusion on its inner edge and the cilia fuscous.

Hab Sikhim, Khasis; Karen Hills, Andamans; Singapore;

Sumatra. Exp. 36 millim.

- SECT. II. (Margarodes) Antennse of male with the basal joint dilated, the base of shaft somewhat thickened and then contorted, hind tibes smooth.
- 5008. Glyphodes laticostalis, Guen Delt & Pyr. p 803, Moore, Lep. Ceyl 111, pl 182, fig 4, C & S no 4201.

 Margarodes nitadicostalis, Guen Delt & Pyr p. 803; C & S. no 4202

 Margaroma leodicealis, Wlk. Cat xviii, p. 530

Pure white, head, collar, base of patagia, and a broad costal band to fore wing dark cupreous brown with metallic tints, palpi white below at base, fore tibus banded with cupreous brown. Fore wing with the costal fascia slightly indented at discocellulars; both wings with a more or less prominent series of silvery fuscous strike close to the margin, which is silvery white.

Hab Throughout India, Ceylon, and Burma; Andamans; Pulo Laut; Sumbawa, Ceram, New Hebrides. Eap 40-46

millim.

- SECT. III Antennæ of male with four caliciform teeth enclosing a hollow at base of shaft, which is much bent and contorted for about one-fourth length and with a small angulation at end of contorted portion; hind legs with a large tuft of hair on outer side of 1st joint of tarsus.
- 5009. Glyphodes ophiceralis, Will Cat xxxiv, p 1440.
- d. Cupreous fuscous; fore wing with slight purplish reflections on disk; both wings with silvery marginal line. Exp 36 millim. Hab. Khásis, Nágas, Tenasserim Java
- Antennæ of male with the basal joint dilated and with SECT. IV a tuft of hair from its extremity, the shaft given off from its inner side and excised at origin
 - A. Antennæ of male with the shaft not thickened on upperside after the excision
 - a. (Dysallacta). Fore wing of male with no fringe of hair on costa below.
- 5010. Glyphodes negatalis, Will Cat vvn, p 468, Led Wien ent. Mon 1863, pl 13, fig 6, C & S no 4143 Botys monesusalis, Will Cat xviii, p 653 Botys phanasalis, Wlk Cat xviii, p 727

Grey, marked with pale fulvous and fuscous, the anal tuft black Fore wing with outwardly-oblique, black-edged, pale fulvous, sinuous subbasal, antemedial, medial, postmedial, and marginal bands, the medial and postmedial irregular and expanding towards costa, the former bearing a discocellular black spot and with a black spot on its outer edge below vein 2, the marginal band highly dentate; a black speck in cell Hind wing with some black and fulvous marks near lower angle of cell, a series of black postmedial striæ on the veins terminating at anal angle, an ill-defined marginal black and pale fulvous band narrowing to anal angle.

Hab Throughout India, Ceylon, and Burma; Australia Evp.

28-30 millim

b. (Pachyarches) Fore wing of male with a fringe of long hair on basal half of costa below

5011. Glyphodes psittacalis, Hubn Samml exot Schmett 111, p 30, figs 523, 524, C & S no 4213 Mangaroma maliferalis, Wth Cat xxxiv, p 1363
Parotis planalis, Warr A M N H (6) xviu, p 117

Bright yellow-green, palpi fulvous, white below, from with a lateral white line, fore legs white, the tibiæ banded with fulvous; thorax and abdomen pale blue below, male with the anal tuft Fore wing with the costa fulvous, both wings with black discocellular spot, the cilia pale fulvous, grey at tips

Hab. Throughout India, Ceylon, and Burma; Andamans Borneo, Celebes, Australia, Fig. Exp. 24-32 millim

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- B. (Arthroschista). Antennæ of male with the shaft thickened on upperside after the excision, fore wing with no fringe of hair on costa below.
- 5012. Glyphodes hilaralis, Wlk Cat. xvii, p 582; Hmpsn. Ill. Het. ix, pl 178, fig 21, C. & S no 4210
 Margaronia aquosalis, Snell Midd-Sum iv, Lep. p. 68

Pale glaucous green and blue; palpi fulvous, white below; frons white; shoulders fulvous; metathorax and abdomen with dorsal fulvous spots developing into rings on posterior segments; anal tuft of male black, fore tibis white banded with fulvous. Fore wing with the costal area fulvous with white below it, a fulvous and black speck in cell and another on discocellulars; the basal area and veins suffused with pale blue, a marginal series of black specks. Hind wing mostly pale alvery blue, with the green confined to the area between lower angle of cell and apex; a marginal black line. Both wings with the cilia grey and white, with a series of fuscous specks at the bases

Hab. NW. and E. Humalayas; Ceylon; Rangoon; Sumatra;

Borneo. Emp 28 millim.

- SECT. V. Male with the basal third of antennæ fringed with hair on upperside.
- 5013. Glyphodes zangisahs, Wik. Cat. xvn, p. 504
- d. Differs from itysalis (p. 354) in the ground-colour being orange fulvous. Fore wing with black-edged white stripe from base of costs and curved stripe from base with its extremities on inner margin; the oblique medial band longer and narrower; the postmedial patch remiform, its lower end rounded and well separated from the prominent black-edged white postmedial line. Hind wing with black discocciliular line and streak along end of median nervure and vein 2; a black-edged white postmedial band, its inner edge widening towards costs. Both wings with a black-edged white submarginal band, its inner edge broad with some purple scales on it, a black line through the cilis.

Hab. Nágas; Borneo; Celebes. Eap. 24 millim.

SECT. VI. Antenna of male normal.

- A. Hind wing of male with the inner area thickly clothed below with tufts of yellowish hair.
 - s. (Cenocnemis). Hind tibia of male without tufts of hair.
- 5014. Glyphodes marginata, *Hmpsn III. Het* 12, p 169, pl. 173, bg. 28.

Differs from migunca in being yellower green, palpi with the tips fulvous, abdomen fulvous near the anal tuft; fore wing with the costa fulvous; both wings with the discocellular specks small;

the cilia fulvous, and also the margin in specimens from the Solomons, a marginal series of dark specks, hind wing with the inner area yellowish

Hab Sikhim, Cachar, Ganjam, Calcutta, Travancore, Ceylon;

Nicobars, Solomons. Exp 40 millim

- b. (Enchocnemidia) Hind tibiæ of male with large thick tufts of black hair on outer side at middle and extremity
- 5015 Glyphodes vertumnalis, Guen Delt & Pyr p 309, C. & S no 4215

 Margarodes squamopedalis, Guen Delt & Pyr p 309

 Margaronia phryneusalis, Wil. Cat xviii, p 531, Moore, Lep Ceyl iii, pl 182, fig 12, C & S no 4204

 Margaronia morvusalis, Wil. Cat xviii, p 533.

 Margaronia atlitalis, Wil. Cat xviii, p 533

 Margaronia melanuralis, Wil. Cat xxxiv, p. 1363

 Margaronia proximalis, Wil. Cat xxxiv, p 1364

 Margaronia herbidalis, Wil. Cat xxxiv, p 1365

 Pachyarches tibialis, Moore, P Z S 1877, p. 618, C. & S no 4214

Enchocnemidia fuscitibia, Warr A M N H (6) xviii, p 116

Differs from marginata in the margin of neither wing being fulvous, the marginal specks often obsolete: the cilia fuscous

The form vertumnalis is small, phryneusalis large, they occur

irrespective of locality.

Hab S Africa, throughout India, Ceylon, and Burma; Andamans, Nicobars, Borneo, Philippines, Java; Ceram; Australia. Exp. vertumnalis 36, phryneusalis 40-44 millim.

- B. Hind wing of male without tufts of hair on inner area below
 - a. Abdomen with the anal tuft not developed into a large brush of long spatulate scales
 - a'. Hind tibiæ of male with no erectile fringe of long black hair on upperside.
 - a². (Chloauges). Both wings with the outer margin slightly angled at middle.
- 5016. Glyphodes suralis, Led. Wien ent Mon 1863, p 405, pl. 14, fig 9
 Margaronia woodfordu, Butl A M N H. (5) xv, p 241.

Emerald-green, palpi fulvous at tap; anal segment of abdomen partly fulvous, the tuft black in male; fore tabue with fulvous tufts; wings with minute discocellular black specks; a marginal series of fulvous spots, the calia fulvous at base, white at tips chequered with fulvous.

Hab Nicobars; Amboins Solomons; Gilbert, Ellice, and

Marshall Islands. Exp. 30-40 millim.

- b. (Glyphodes). Wings with the outer margin evenly curved.
- 5017. Glyphodes amphitritalis, Guen Delt & Pyr p 307, C. & & no 4209
- d. Pale blue, palpi fulvous, white below, abdomen with the anal tuft pale fulvous at extremity. Fore wing with the costa narrowly fulvous both wings with marginal series of black specks.

Hab. Sikhim, Khásis; Shán States, Mysol, Solomons. Evp.

46 millim.

5018. Glyphodes glauculalis, Guen Delt & Pyr p 306, Moore, Lep. Ceyl iii, pl 181, figs 2, 2 a, C & S no 4207

Margaroma marthesiusalis, Wth. Cat xviii, p 531, C. & S no 4211

Margarodes nersis, Meyr Trans Ent. Soc 1887, p. 271.

Glaucous green, palpi bright fulvous, white below, neck and shoulders fulvous, male with the anal tuft black. Fore wing with a fulvous costal fascia on basal two-thirds with white below it; a minute dark discocellular speck; both wings with a marginal series of minute black specks.

The typical Malayan form is less blue-green in tone than the Indian forms marthenusalis and neress, of which the former from N.E. India and Burma is small, the latter from S. India and

Ceylon large

Hab Sikhim; Assam; Calcutta; Bombay presidency, Travancore; Ceylon, Burma; Sumatra; Borneo, Java, Ternate Exp.: glauculahs 48-50, marthesiusalis 34 millim.

5019. Glyphodes pomonalis, Guen Delt & Pyr. p. 309; Moore, Lep Ceyl m, p 327, pl 182, fig 7, C. & S no. 4212

Bright emerald-green; palpi white below; legs and underside of thorax and abdomen white, anal tuft of male large and black; fore wing with the costs white; hind wing with the costs and unner areas and folds below the cell white; both wings with the cibs tipped with white

Hab. China, Sikhim, Bombay presidency; Ceylon; Sumbawa.

Exp. 24-30 millim.

5020. Glyphodes nilgirica, n. sp.

Differs from pomonals in being rather darker green; the palpi brown at taps; fore time banded with brown. Fore wing with the costa fuscous, each wing with a discocellular black spot and the cilia fuscous.

Hab. Nilgiris (Hampson); Travancore (Fergusson). Exp.

38 milhm Type in B.M.

5021. Glyphodes punctiferalis, Will Cat xxxiv, p. 1364

Differs from nilguica in the palpi being fulvous, white below, both wings with a marginal series of dark specks or striæ, the ciba brown at base, whitish at tips

Hab Nágas, New Guinea, Solomons Exp 28-40 millim

5022 Glyphodes fallacialis, Snell Trans Ent Soc 1890, p 609

Differs from nilgirica in the palpi being fulvous, white below, wings without the black discocellular specks

Hab Sikhim, Khásis Exp 38 millim.

5023. Glyphodes cupripennalis, n sp

J. Differs from ophiceralis (p 347) in the fore wing being very much longer and more produced at apex, neither wing with silver on the outer margin

Hab Tenasserim Valley (Doherty) Exp 44 millim. Type in

coll. Druce

5024. Glyphodes picticostalis, n. sp

¿ Silvery white, palpi and shoulders fulvous and black at sides. Fore wing with the costa black, an orange stripe below it, a black speck in middle of cell, both wings with black discocellular lunule and fine marginal line. Underside with diffused postinedial series of fuscous spots and of marginal conjoined patches.

Hab. Tenasserim Valley, Andamans (Doherty) Exp 30 millim.

Type in B M.

5025. Glyphodes unionalis, Hubn Eur Schmett., Pyr fig 132
Botys quinquepunctalis, Boisd Faun Ent Madag p 117, pl 16,
fig 5
Margarodes transvisalis, Guen Dell & Pyr. p 304, C. & S
no 4208
Margaroma claralis, Wlk Cat xxxiv, p 1362
Botys intactalis, Wlk Cat xxxiv, p 1402

Pure white. palpi fulvous, white below; from and shoulders fulvous, fore tibiæ banded with fulvous, abdomen with some black hairs in the anal tuft, wings semihyaline, fore wing with the costa fulvous.

The fore wing usually has traces of two brown specks below the costa before middle, one at each angle of cell, and one below origin of vein 2, all these being prominent in the form quinque-punctalis; there are sometimes also traces of a marginal series of black specks.

Hab. S. Europe, S. and W Africa; Madagascar, Mauritius, Aden; throughout India and Ceylon, Australia. Exp. 36-40 millim.

5026 Glyphodes nigropunctalis, Brem Lep Ost-Sib p 67, pl. 6, fig 5
Botys submargmalis, Wik Cat xxxiv, p 1414, C & S. no 4203.
Margaroma neomera, Butl Ill. Het 11, p 57, pl 39, fig 5

Differs from unionals in the fore wing having the costal fascial usually broader and browner; the spots around the cell usually well marked, hind wing usually with a speck at lower angle of cell, both wings with indistinct submarginal maculate fuscous line; the marginal black specks usually prominent.

Hab Siberia; Japan; throughout India and Ceylon Exp.

32-36 millim.

5027. Glyphodes celsalis, Wil. Cat xviii, p 654, C & S no. 4205
Botys partialis, Led Wien. ent Mon 1863, pp 371, 465, pl. 9,
fig 8
Margaronia musitata, Butl A M N H (5) iv, p 454

Pure white; palpi fulvous, white below at base, shoulders fulvous; fore legs fulvous, the tibia banded with white Fore wing with the costa fulvous; two small triangular dark-edged marks with pale fulvous centres in the cell before the middle, a large irregularly remform similar mark on discocellulars and smaller oval mark below origin of vein 2. Hind wing with similar oval mark on discocellulars and black speck at lower angle of cell. Both wings with submarginal pale fulvous line highly excurved between veins 5 and 2; a marginal series of black specks

Hab. Throughout India, Ceylon, and Burma, Borneo. Exp.

24-32 millim.

5028. Glyphodes warrenalis, Swinh. A. M N H (6) xiv, p 148.

J. Differs from celsules in the fore wings having the costal area darker, the two marks in the cell further apart, the discocellular mark reduced to an irregular lumile, the mark below voin 2 small and obsolescent. Hind wing with the discocellular mark absent. Both wings with the submarginal line much less excurved between voins 5 and 2

Hab. Khásıs; Nágas. Exp. 32 millim.

5029. Glyphodes fraterna, Moore, Lep. Atk. p. 217; C. & S. no 4206.

Differs from celeals in the palpi being black-brown. Fore wing with the costal fascia, the two antemedial spots below the costa, the medial patch, and a large marginal patch beyond the post-

medial line, extending from the costa to vein 3, black-brown, both wings with the postmedial line indistinct

Hab. Khásis; Nágas. Exp. 22 millim

- 5030 Glyphodes hermesalis, Wik Cat xviii, p 516 Pitama lativitta, Moore, Lep. Ath p 217, pl 7, fig. 21, C & S no 4230.
- d. Pale yellow, palpi except at base, frons, antennæ, and stripes on shoulders and vertex of thorax black; thorax below with a ridge of large leaden-coloured scales near mid legs, abdomen with the distal half black. Fore wing with the costal area black, with three spots in cell conjoined to it; an outwardly-oblique nearly straight postmedial line with the area beyond it black. Hind wing with postmedial line curved from costa to anal angle, the area beyond it black.

Hab. Sikhim; Khásis, Borneo. Exp 36 millim.

5031. Glyphodes perspectalis, Wik Cat xviii, p 515.
Phacellura advenalis, Led Wien ent Mon 1863, pp 401, 478,
pl 13, fig 17

Head fuscous, palpi white below; thorax and abdomen white and fuscous. Fore wing fuscous, with white spot in cell and discocellular lunule, a broad white fascia below the cell from base to marginal area and fasciæ in the interspaces beyond the cell, the two between veins 2–5 short. Hind wing white, with broad fuscous marginal band narrowing to anal angle.

Hab. Japan, China; Dharmsála Exp. 50-54 millim.

5032 Glyphodes pulverulentalis, n sp.

o. Differs from negatalis (p. 347) in being thickly irrorated and striated with black; abdomen with oblique lateral stripes; the anal tuft black with brown middle. Fore wing with all the markings obscured by the spots and striæ, the antemedial, medial, and postmedial bands broader and less irregular, the 1st dentate inwards on vein 2, the 2nd without discocellular spot on it, the 3rd with series of pale specks on its outer edge from vein 4 to inner margin; the dentate submarginal line replaced by a series of diffused black patches in the interspaces. Hind wing thickly irrorated and striated, oblique black-edged brown postmedial and submarginal bands almost meeting at a point near anal angle; cilia of both wings fuscous, with fulyous and brown lines at base

Hab. Nágas; Tenasserim (Doherty) Exp. 30 millim. Type in

coll. Elwes.

5033. Glyphodes dysallactalis, n. sp.

d. Differs from negatalis in being paler. Fore wing with the vol. iv. 2 A

subbasal, antemedial, medial, and postmedial bands broader and regular, the antemedial meeting the medial just above inner margin; the discocellular spot pale, a large black patch above inner margin connecting the medial and postmedial bands, a nearly regular submarginal band. with its outer black edge diffused and maculate. Hind wing with black-edged pale oblique postmedial and submarginal bands nearly meeting at a point near anal angle, the latter with some diffused fuscous patches beyond it.

Hab. Tenasserim (Doherty). Exp. 30 millim. Type in coll.

Druce.

5034. Glyphodes stolklis, Guen Delt. & Pyr. p 293, pl. 3, fig. 11; C. & S no 4189.

Head, thorax, and abdomen whitish with brown stripes, palm banded with brown, abdomen fulvous at extremity, the anal tuft - black. Fore wing hyaline white, with the markings occupying "the greater part of the wing, broad oblique pale fulyous subbasal and antemedial bands with black edges and black line at middle; a similar medial band broadest at costs and joined to the marginal markings at inner margin, with a hyalme discocellular lunule on it surrounded by black lines, and a hyaline spot at vein 2; a similar postmedial band broadest at costs, where it is followed by a tribd white spot, and conjoined to the marginal fuscous area below vein 6; the marginal fuscous area has a black band on its inner edge and a submarginal band most developed below apex; calla white at tips towards outer angle. Hind wing pearly hyaline white; the median nervure and veins of inner area streaked with brown, a discocellular fuscous band with some fulvous on it, and continued to the marginal markings, the marginal area fuscous and brown, broad at costs, narrowing to anal angle, with a white line near its inner edge followed by a black band, a submarginal black band towards apex; a fine marginal black line; the cilia white except at the spex

Hab. Nepal; Sikhim, Assam, Ceylon, Pulo Laut, Borneo,

Australia; Fipi. Exp. 34 millim.

5035. Glyphodes itysalis, Wik Cat. xvii, p 501, Moore, Lep Ceyl. iii, pl 180, fig 4, C. & S no 4184
Glyphodes pierpersialis, Snell Midd-Sum iv, Lep p 68
Glyphodes malayana, Butl P Z. S 1880, p. 684

Head black and white, collar and patagia white, the shoulders black, thorax and abdomen brownish grey, the anal tuft black. Fore wing fulvous and fuscous; a white fascia on basal two-thirds of inner margin interrupted at middle; an oblique black-edged fulvous antemedial line ending below median nervure, a similar medial band, a metallic blue discocellular line, a postmedial broad white band ending in a point above inner margin and with its outer edge angled at middle. Hind wing hyaline white, with a black line on discocellulars. Both wings with an oblique white

postmedial fine line terminating on margin of hind wing at vein 2 and followed by a lilacine grey band, the area beyond it fuscous

Hab Formosa, Assam, W. and S India, Ceylon, Burma, Andamans, Nicobars; Sumatra, Borneo. Java. Exp. 24-26 millim.

5036 Glyphodes zelimalis, Wik Cat xvii, p 502, Moore, Lep Ceyl. iii, pl 215, fig 6. C & S no 4190 Glyphodes nyctealis, Snell Midd-Sum. iv, Lep p 68

Differs from *itysalis* in the ground-colour being ferruginous and grey; the head, thorax, and abdomen grey, striped with ferruginous. Fore wing with no white fascia on inner margin, the medial band continued to inner margin and of even width throughout, the postmedial band broadly triangular, with its base on the costa. Hind wing with ferruginous streak on base of vein 2.

Hab Khásis, Nilgiris, Ceylon, Sumatra, Borneo. Exp. 30 millim

- 5037. Glyphodes eurytusalis, Wil Cat xvii, p 503
 Glyphodes opalalis, Hmpsn Ill Het viii, p 135, pl 155, fig 20
- Q. Head fulvous, from with a lateral white line, thorax and abdomen white at sides, with a broad dorsal fulvous band. the shoulders fulvous Fore wing with the inner area below median nervure iridescent white; the costal area fulvous, crossed by an oblique medial fulvous-yellow line, followed by an iridescent white patch in end of cell and a metallic-blue discocellular line, a large iridescent white triangular postmedial patch with its apex on vein 2 Hind wing iridescent white. Both wings with the outer area fulvous and fuscous, bounded inwardly by a double black line with pale middle. strongly toothed on vein $1\,c$ of hind wing, then running out to the margin; some fuscous suffusion running up vein $1\,b$ from the margin, cilia pure white

Hab Khásis, Nilgiris; Ceylon; Borneo; Loyalty Islands.

Exp. 36 millim.

5038 Glyphodes bivitralis, Guen Delt & Pyr p 293, Moore, Lep. Ceyl 111, pl 180, figs 2, 2 a (larva), C & S no 4179

Head, thorax, and abdomen chestnut-brown, palpi white below; patagia white at tips, abdomen white at sides and below, anal tuft of male black. Fore wing chestnut, a white fascia on basal half of inner margin, an oblique antemedial black line, a large black-edged iridescent white patch in and below end of cell, a black discocellular speck and patch with some iridescent scales on its edges below lower angle of cell, a large cornucopia-shaped black-edged iridescent white postmedial patch, with a black line beyond it bent inwards to costa. Hind wing iridescent hyaline white, with a broad chestnut marginal band with black line on its

inner edge; both wings with grey on the margin; the cila fulvous,



Fig. 191 — Glyphodes buntrales, S. 1.

the taps grey on fore wing, white on hind wing.

Larva olive-brown, palest beneath; dorsal, subdorsal, and lateral series of white dots, the last with a few radiating white hairs, some black dots on thoracic and terminal somites, head reddish, with black lateral streak

Pupa pale red, with long antennal sheath. Food-plant, Ficus

oppositifolia

Hab Formosa; Sikhim; Assam; W. and S. India, Ceylon; Burma, Andamans; Borneo. Exp. 30-34 millim.

5039. Glyphodes naralis, Feld. Reis Nov pl 186, fig. 88. Glyphodes lacteata, Butl P. Z & 1880, p. 685

Ochreous; the palpi and a stripe on vertex of head and collar black. Fore wing with the basal two-thirds of inner area ochreous, the costal area fuscous at base, then with a fulvous-yellow antemedial band, then a triangular dark-edged medial yellow patch with fuscous below it, then a fulvous-yellow band with a silvery discocellular line and spot on vein 2 on it; a large postmedial dark-edged yellow triangular patch with its apex on vein 1. Hind wing semihyaline ochreous, with fulvous-yellow lines on discocellulars and base of vein 2, both wings with the marginal area fulvous yellow, terminating before anal angle of hind wing and inwardly edged by two black lines, then a silvery-grey line followed by a black band; a fine marginal black line.

Hab. Sikhun; Borneo. Emp. 28-32 millim.

5040. Glyphodes casalis, Wile, Cat. xvii, p 499, Moore, Lep Ceyl. in, pl. 183, fig. 7, C & S. no. 4804

Yellow; the palpi, head, thorax, and abdomen with black lines and bands; male with the anal tuft black. Forewing with subbasal black line, an antemedial oblique band formed of two blackedged pale yellow patches; a large subtriangular medial black-edged patch with black below it on inner margin; a postmedial band formed of two irregular black-edged patches with their inner and outer edges indented; a submarginal black-edged patch on costa, with four spots on black suffusion extending from it to inner margin. Hind wing semihyaline, with a black discocellular line; a double oblique medial black line filled in with yellow; a postmedial black line with the area beyond it yellow. Both wings with some irregular submarginal black marks between apex and middle and a marginal black line.

Hab. Sikhim; Ceylon; Burma; Andamans. Exp. 26-34 millim.

5041. Glyphodes canthusalis, Wik. Cat xvii, p 505
Botys luciferalis, Wik Cat. xxxiv, p 1412, C & S no 4186.
Glyphodes lora, Wik. Cat xxxv, p. 1978

Ferruginous red and yellow, spotted and irrorated with white; frons white, abdomen with paired white spots on basal segments. Fore wing with series of indistinct antemedial white spots, a large dark-edged hyaline white medial patch with its upper edge indented; traces of some medial white spots; a large irregular postmedial dark-edged hyaline white patch, with a dentate white band beyond it from costa to vein 2; the margin dark, expanding into a diffused patch at outer angle. Hind wing with a large dark-edged hyaline white postmedial patch from costa to vein 2; an indistinct submarginal, minutely dentate white line; the margin dark.

Hab. Formosa, Sikhim; Assam, Calcutta; Bombay; Canara; Andamans. Exp 30-36 millim

5042 Glyphodes pyloalis, Wlk Cat xix, p. 973, Moore, Lep Ceyl.
111, pl 180, ing 3, C & S no 4188
Glyphodes sylphans, Butl Ill Het. 11, p 57, pl. 39, fig. 2.

Brown, suffused in parts with fuscous, vertex of head, patagia, and sides of abdomen striped with white. Fore wing pale fulvous. the inner margin white, the base fuscous; an antemedial oblique white line, followed by a black-edged fulvous band, then a triangular black-edged medial hyaline white patch, followed by a fulvous band with discocellular lunule and ring-spot on vein 2 on it, a large black-edged hyaline white triangular patch with its apex on vein 1; a submarginal black-edged white line expanding into a dentate mark below costa; some fuscous suffusion inside the margin below apex; the margin pale, with a fine black line. Hind wing hyaline white; a broad marginal pale fulvous band with black inner edge, a more or less complete submarginal diffused fuscous band; the margin white, with a fine black line.

Hab. Japan; China; throughout India, Ceylon, and Burma. Exp. 26 millim.

5043. Glyphodes lacustralis, *Moore*, *P. Z S* 1867, p 93, pl 7, fig 11, *C & S* no 4185

Head fulvous, palpi white below, thorax and abdomen yellow; the shoulders and terminal segments of abdomen fulvous. Fore wing fulvous, the inner margin narrowly white; a black spot at lower angle of cell, a black-edged white fascia below median nervure, separated by a slight fuscous bar from a large triangular postmedial patch emitting a projection towards the apex, its outer edge broadly black; a submarginal black line from vein 7 to 2 Hind wing white, with fulvous marginal band not reaching anal angle, and with a black band on its inner edge; the cilia white.

Hab. Sikhim. Exp. 38 millim.

5044. Glyphodes crithealis, Wik. Cat xvn, p. 844, C & S no 4258. Glyphodes chilka, Moore, Lep. Atk. p. 216, pl vii, fig 9; C. & S. no 4181.

Red-brown suffused with fuscous; palpi black, white below. Fore wing with an oblique hyaline soriga at middle of cell; a black-edged hyaline white patch in and below end of cell, a black-edged postmedial hyaline white patch, extending from the subcostals to vein 2, but varying much in size and shape, with a sunious pale line beyond it. Hind wing with the basal half hyaline white, with a black speck or spot on discocellulars, the inner area suffused with brown; a postmedial oblique black line dentate on vein 2, followed by a pale line, the area beyond it brown; both wings with marginal black line.

Hab. China; N.W. and E. Himalayas. Exp. 32-36 millim.

5045. Glyphodes sinuata, Fabr Spec. Ins. ii, p. 267, Moore, Lep. Ceyl. in, pl 183, figs. 2, 2 a (larva); C & S no 4124
Phalsens marginata, Cram. Pap Exot. 1v, pl 400, fig. I

Pale golden yellow; head and collar crimson; abdomen tinged with crimson above towards extremity, wings semihyaline. Fore wing with the costal area crimson, emitting two small teeth across the cell; the outer margin pink, expanding into a large patch below apex and small patch at outer angle. Hind wing with indistinct sinuous postmedial fuscous line obsolete below vein 2; a crimson patch at apex and small marginal patch at vein 2.

Larva thick, green, with a lateral series of black and white spots on a slender line. Pupa green, yellowish below, with a short anal

point and pedal sheath. Food-plant, Moduca.

Hab. Ethiopian region; Nilgiris; Ceylon. Exp. 44 milim.

5046. Glyphodes bicolor, Swains. Zool Ill (1) n, pl. 77, fig 2, C. & S. no 4178.

Eudioptis perspicillahs, Zell K Vet-Ak Handl 1852, p. 58. Glyphodes durnalis, Guen Delt & Pyr p. 294. Glyphodes parvalis, Wik. Cat. xxxiv, p. 1355.

Black-brown; head, collar, and patagas mostly white; palpi black, white below; anal tuft black. Fore wing with two white marks on basal part of inner margin; a black-edged semilyaline white medial band not reaching the costa, often with a spot in the cell before it; a large oval black-edged hyaline white postmedial patch between the subcostals and vein 2, with a small white triangular spot on costa beyond it; the chia white except at middle. Hind wing with the basal area hyaline white; the outer area black-brown, with a black line on its inner edge and a fine marginal black line; the chia white.

Hab. S. Africa; throughout India, Ceylon, and Burma; the

Malayan subregion; Australia. Exp. 22 millim.

5047 Glyphodes ernalis, Swinh A M N. H. (6) xiv, p. 148.

Differs from bicolor in being blacker. Fore wing with the outer edge of the medial band angled just above vein 1, the postmedial spot irregularly quadrangular.

Hab. Kbásis; Burma Exp. 24 millim.

5048. Glyphodes minimalis, n sp

Differs from bicolor in the fore wing having the basal area white except on costal area, the antemedial band broken up into a diamond-shaped spot separated from the markings on inner margin or only slightly conjoined to them

Hab Ceylon (Green) Exp 16 millim. Type in B. M.

5049 Glyphodes actorionalis, Will Cat. xvii, p 498; Moore, Lep. Ceyl in, pl 180, fig 1. C & S no 4177.

Glyphodes zelleri, Led Wien ent Mon 1863, p 478, pl 14, fig 3. Glyphodes conclusalis, Wlk Cat xxxiv, p 1354, Hmpsn Ill Het vii, pl 156, fig. 12

Glyphodes tumidalis, Warr A M N H. (6) xvii, p 118. Glyphodes violalis, Warr. A M. N. H (6) xvii, p. 118

Differs from bicolor in the medial band of fore wing being reduced to an oblique patch extending from subcostal nervure to above vein 1, an indistinct curved submarginal white line arising from the spot on costa. Hind wing with the marginal band narrow, tapering to anal angle, and with diffused grey on it in the form actorionalis, broader, more or less even throughout, and with a fairly well-defined grey line on it in the form zellers

Hab Sikhim; Khásis, W. and S. India; Ceylon; Andamans;

the Malayan subregion. Exp. 24-32 millim.

5050 Glyphodes callizona, Meyr Trans Ent Soc 1894, p 5

d Differs from actorionalis in the abdomen having the three segments next to the anal segment orange above. Fore wing with small spot before the antemedial patch, which is large and obliquely wedge-shaped; hind wing with the marginal band of even width throughout.

Hab Shan States. Exp. 26 millim.

5051. Glyphodes prothymalis, Swinh. Trans Ent Soc 1892, p 19, pl. 1, fig 15

Differs from actorionals in the fore wing having a large antemedial triangular hydrine white patch extending from subcostal nervure to vein 1, along which it runs out in a point; a white discocellular lunule, the postmedial patch very large and subquadrate, the submargunal line prominent, not reaching the costa, and expanding below the apex. Hind wing with the marginal band of even width throughout, without a black line on its inner edge, and with a better-defined marginal white line.

Hab. Khásis. Exp 38 millim.

5052. Glyphodes orbiferalis, n. sp Margaroma principalis, Meyr Trans. Ent Soc. 1894, pp 5, 456 (nec Wik).

Q. Differs from prothymals in the fore wing being shorter, broader, and less produced at apex; the triangular hyaline patch larger; no white discocellular line, the postmedial patch larger and rounded. Hind wing with the marginal band even throughout; the cilia black at base.

Hab Shan States; Bernardmyo, Burma, S.E. Borneo (Doherty).

Emp. 34 millim. Type in coll. Elwes.

b'. Hand tibiæ of male with erecisle fringe of very long black hair on upperside.

5053. Glyphodes hadialis, Wik Cat. xviii, p 694.

of. Head and thorax yellow; a jet-black stripe along palpisides of head, and shoulders; thorax with dorsal black stripe ending in a fulvous spot on metathorax, abdomen fulvous, ringed with black towards extremity. Fore wing with short black line from base of costs; some yellow at base of inner margin, a large conical black-edged yellow medial patch from subcostal nervine to inner margin, and an ovate patch beyond the cell from subcostals to vein 2. Hind wing yellow, an oblique postmedial black line from costs to outer margin near anal angle, the area beyond it, fulvous; both wings with black marginal line, the cilia pale brown at base, white at tips.

Hab Tenasserim; Borneo. Exp. 30 millim.

b. (Phacellura). Abdomen with the anal tuft developed into a large brush of long spatulate scales.

5054. Glyphodes indica, Saund Trans Ent Soc (2) 1, 1851, p 163, pl. 12, figs. 5, 6, 7, Indian Museum Notes, 111, p 136 (larva); C & S no 4197

Phakellura zygenalis, Guen. Delt & Pyr p 297

Phakellura gazorialis, Guen Dett & Pyr p 297 Eudioptis capensis, Zell K Vet-Ak. Handl. 1852, p. 52

Head and thorax black-brown; palpi white below, patagia white at tips, abdomen white, with the 7th and 8th segments black, the anal tuft brown and black. Fore wing with the costal and miner areas broadly black, leaving a triangular pearly hyaline white patch; the lower edge of the costal area minutely dentate, the inner edge of the marginal band dilated from vein 3 to outer angle. Hind wing pearly hyaline white, with a marginal black band broad at costa

Larva feeds on cotton.

Hab. Throughout the Ethiopian, Oriental, and Australian regions. Exp. 24-28 millim.

Genus PYGOSPILA

Pygospila, Guen Delt & Pyn p 312 (1854) Phlyctænia, Hubn Verz p 359 (* 1818), non descr. Lomotropa, Led Wien ent Mon 1863, p. 404 Rhagoba, Moore, Lep Atk p 217 (1888)

Type, P. tyres, Cram.

Range India, Ceylon, and Burma, Malayan subregion to Sumbawa.

Palpi upturned, the 2nd joint broadly scaled in front, the 3rd porrect and lying on the hair of 2nd joint, maxillary palpi filiform and as long as the labial; frons rounded, antennæ of male minutely ciliated, patagia extending beyond the metathorax, tibiæ with the outer spurs half the length of the inner, abdomen long, male with the anal tuft large. Fore wing with the costa arched towards apex; the outer margin oblique, the inner margin lobed before middle and somewhat excised towards outer angle, vein 3 from angle of cell, 4, 5 approximated for about one-third length; 7 curved and approximated to 8, 9, 10 closely approximated to 8, 9. Hind wing with the costa arched at middle; vein 2 from near angle of cell; 3 from the angle, 4, 5 not approximated towards origin; 6, 7 shortly stalked and curved, 7 anastomosing slightly with 8.

SECT I (Pygospila) Fore wing of male with no distortion of costa, hind wing with the inner margin not tufted

A Hind wing with veins 6, 7, 8 normal.

5055 Pygospila octomaculalis, Moore, P Z S 1867, p. 95, C & S. no 4223

Rhagoba bimaculata, Moore, Lep Ath p 218, C & S no 4231

d Black, the head, thorax, abdomen, basal and costal areas of fore wing shot with metallic blue, the last with white spot below origin of vein 2 and larger spot beyond the discocellulars

2 with the spots larger and spots on hind wing similar to those

on fore wing

The cala are sometimes white towards outer angle of fore wing. The male is sometimes marked like the female or intermediate. Hab. Sikhim; Khásis Evp., 3 40, 2 40-48 millim.

- B. Hind wing with vein 8 approximated to 7, 6 slightly curved downwards, 7, 8 slightly roughly scaled below.
- 5056. Pygospila tyres, Cram Pap Exot. 111, pl 263, fig C, C & S. no 4218 (part)

Black shot with purple, palpi white below, from with a lateral white line, thorax and patagia striped with white, abdomen with

paired dorsal and lateral series of white spots. Fore wing with two oblique whitish subbasal lines; an oblique antemedial series of three white spots, the two below the cell nacreous hyaline; a speck in the cell, a nacreous spot in end of cell and larger spot below the end, a bidentate spot beyond the cell and another towards apex. Hind wing with nacreous streaks in and below the cell, the cilia white towards anal angle. Both wings with a pair of spots between origin of veins 3 and 5, three submarginal smaller spots and a spot below vein 2.

Hab Throughout India, Ceylon, and Burma, Java Exp. 42-

46 millim

- C. Hind wing of male with vein 8 widely separated from 7 and only touching it at one point, 6 much bent downwards, the veins beyond the cell prominently roughly scaled.
- 5057 Pygospila cuprealis, Swinh. Trans. Ent. Soc. 1892, p. 19, pl. 1, fig. 4
- d. Differs from tyres in being cupreous brown with a faint purple tange; the neck fulvous, the thoracic stripes obscure and brownish, the abdominal spots small. Fore wing with the subbasal markings obsolescent, the three submarginal spots absent, and the spots below vein 2 minute. Hind wing with the three submarginal spots and the spot below vein 2 obsolescent

Hab. Khásis, Momeit, Burma. Exp. 48 millim.

- SECT. II (Lomotropa) Fore wing of male with a postmedial subcostal fold on underside filled with close-set fulvous scales, the costa above it crenulate; hind wing with the inner area thickly tufted with fulvous hair.
- 5058. Pygospila costifiexalis, Guen Delt & Pyr p 318, Led Wien. ent Mon. 1863, pl 14, fig. 8, C & S no. 4218 (part).
 - o. Differs from tyres in being cupreous brown, with a slight

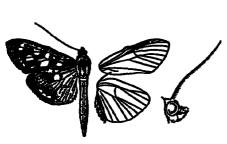


Fig 192—Pygospila costiflexalis, o

purplish tinge, the neck fulvous. Fore wing with the subbasal lines and a patch above middle of inner margin pale fulvous; the spots beyond the cell and towards apex separated into two pairs, the upper submarginal spot absent and the other two small Hind wing with the spot towards apex absent.

♀ with the markings as in tyres.
 Hab. Bombay; Travancore, Ceylon; Sumbawa. Exp., & 44,
 ♀ 42 millim.

Genus HEORTIA.

Heortia, Led Wien ent. Mon 1863, p 402 Tyspana, Moore, Lep Ceyl in, p 256 (1885).

Type, H dominalis, Led, from the Malayan subregion.

Range China, Sikhim, Assam, Ceylon

Palpi upturned and reaching vertex of head, the 2nd joint slightly fringed with scales, the 3rd porrect; maxillary palpi filiform; from rounded, antennæ of male almost simple, hind tibiæ with a tuft of hair on outer side from base, build stout. Fore wing with the apex rounded; vein 1 a strongly developed; 3 from before angle of cell; 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with vein 3 from near angle of cell; 4, 5 from the angle, 6, 7 from upper angle, 7 anastomosing with 8.

5059. Heortia vitessoides, *Moore, Lep Ceyl* in, p 256, pl. 178, figs. 3, 3 a (larva), C & S no 4517

Head primrose-yellow, palpi and antennæ black; thorax yellow, with black stripes on vertex and tegulæ, abdomen orange, with black lines on proximal segments. Fore wing primrose-yellow;



Fig 193 —Heortia vitessoides, of

two black subbasal spots, outwardly oblique antemedial and medial bands, the former not reaching inner margin, the latter broader and dilated at costa and inner margin, the interspaces of outer area with broad blue-black stripes. Hind wing white, with broad blue-black marginal band.

Larva green, the head black; a subdorsal black line with two spots on each somite below it, the stigmata black, the ventral surface yellowish green

Hab. Hongkong, Sikhim, Sibságar; Ceylon. Exp. 40 millim.

Genus EUCLASTA.

Euclasta, Led Verh zool.-bot Ges Wien, 1855, p 252. Ilurgia, Wik Cat xviii, p 544 (1859)

Type, E splendidalis, Herr.-Schaff., from Syria
Range. Syria; India, Ceylon, and Burma; New Guinea;
Australia

Palpi with the 2nd joint upturned and broadly scaled in front, the 3rd porrect and lying on the hair of the 2nd joint, maxillary palpi dilated with scales, from flat and oblique; antenna slightly longer than the fore wing and ciliated, legs long, take with the outer spurs half the length of inner, abdomen long. Fore wing long and narrow, the apex rounded; vein 3 from before angle of cell; 4, 5 well separated at origin, 7 straight and not approximated to 8, 9. Hind wing with the cell more than half the length of wing; vein 3 from angle; 4, 5 closely approximated for a short distance; 6, 7 stalked, 7 anastomosing with 8.

5060. Euclasta defamatalis, W.W. Cat xvm, p. 544; Hapon. III Het. 1x, pl 174, fig 1, C. & S. no 4225.

Head and thorax pale fulvous; palpi white below, from with lateral white lines; abdomen pale fuscous, ringed with white.



Fig. 194 — Euclasta defamatalis, of

Fore wing pale fuscous, the costal area brownish to end of cell and with a black speck in cell and discocellular spot, a white fascia through lower part of cell; the outer area whitish, the veins streaked with brown and two subapical black streaks, a white line from costa before

apex excurved to vein 4, then curving round and running to near base of inner margix, with some black on its inner edge and slightly dentate at each vein; a marginal white line. Hind wing semihyaline; the apical area slightly suffused with fuscous.

Hab Throughout India, Ceylon, and Burma. Exp., of 24,

Ω 30 millim.

5061. Euclasta filigeralis, Led. Wien. ent Mon 1863, p. 481, pl 15, fig. 14

o. Differs from defamatals in the head, thorax, and abdomen being rufous, the last with the discoccilular speck minute and no spot in cell, the white fascia through the cell to outer margin much finer; the curved line interrupted below apex and above the fascia on inner margin, which is traversed by a fine rufous line.

Hab. Bangalore, Ceylon. Exp. 26 millim

Genus POLYTHLIPTA

Polythhpta, Led. Wien ent Mon 1863, p 389.

Type, P. macralis, Led.

Range India, Ceylon, and Burma, Malayan subregion to Ambouna.

Palpi obliquely upturned, the 2nd joint fringed with long hair below, the 3rd naked and porrect; maxillary palpi filiform; from rounded; antennæ almost simple and about the length of fore wing; legs very long, mid and hind tibiæ with the outer apurs two-thirds length of inner; abdomen long and slender. Fore wing with

vens 3, 4, 5 from angle of cell, 7 curved and approximated to 8, 9 for about one-third length, 10 closely approximated to 8, 9. Hind wing with the cell short; the discocellulars erect; vein 3 from angle of cell; 4, 5 approximated for a short distance; 6, 7 very shortly stalked, 7 anastomosing with 8.

SECT. I. Fore tibue of male fringed with hair on outer sides; the 1st joint of tarsus fringed with hair on both sides.

5062. Polythlipta cerealis, Led. Wien ent Mon 1863, p 477; C. & S no 4191.

Glyphodes vagalis, Wik Cat xxxiv, p 1356, C & S. no. 4196

Head and collar yellow-brown; palpi white below; frons with lateral white lines, patagia speckled with brown; metathorax with a brown band; abdomen with paired brown lateral segmental stripes. Fore wing white; the cell brown, enclosing three blackedged white spots, the spot in end of cell large, two bands given



Fig 195 -Polythlipta cerealis, 5.

off from middle of cell, one curving inwards to base, the other outwards to inner margin, with a tooth above inner margin touching the submarginal band; a streak from end of cell to the black-edged submarginal band, which is angled outwards to the margin at middle,

a marginal fuscous and yellow line emitting two dentate marks below apex. Hind wing semilyaline white, with a black speck at lower angle of cell or discocellular bar; a narrow black-edged brown submarginal band angled outwards nearly to the margin at vein 3, then sinuous to inner margin; a marginal fuscous and yellow line.

Hab NW. and E. Himalayas; Khásis. Exp. 36-38 millim.

5063. Polythlipta ossealis, Led Wien. ent. Mon. 1863, p 389, pl. 12, fig 18

Differs from cereals in the whole abdomen being brown above; the wings yellowish white. Fore wing with the markings more fuscous, a large brown patch below middle of cell with ill-defined markings interrupted by white patches between it and base on one side of it and on the other the submarginal band, which is broader towards costa; a subquadrate marginal patch below apex instead of the dentate marks. Hind wing with the submarginal band fuscous, narrow below vein 5, from which point it is sharply bent out to an angle on vein 3 instead of excurved, then interrupted and maculate; fuscous marginal patches at apex and below vein 2.

Hab Sikhim; Bhutan; Khasis; Sumatra; Amboina. Exp. 36

millim.

5064. Polythlipta divaricata, Moore, Lep Ceyl m, p 311, pl 179, fig 16 a (larva), C & S. no 4193

Differs from osseals in being yellower white. Fore wing with black-edged yellow markings, reduced to a patch at base, a medial band expanding below the cell and connected by a streak on median nervure and vein 3 with the discocellular patch and submarginal band, which is narrow below vein 3 and expands again on inner margin, the subquadrate patch below apex conjoined to the submarginal band. Hind wing with two discocellular specks, the submarginal band almost obsolete below-yein 5, except the spot on inner margin.

Larva slender; olive-green; the thoracic somites ochreous, a lateral dark green band. Pupa green, with short anal point and

pedal sheath Food-plant, Phaseolus.

Hab Ceylon Exp 36-42 millim.

5065 Polythlipta macralis, Led Wien ent Mon. 1863, p 389, pl 12, fig 14, C & S no 4194
 Polythlipta distorta, Moore, Lep Ath p. 215, pl 7, fig 25, C. & S. no 4192

Differs from osseals in being pure white, with faint fuscous markings; abdomen ringed with white. Fore wing with the fuscous markings forming an almost regularly sinuous fascia from the end of cell to base of inner margin, the white spots in cell small and conjoined, the white on inner margin prominent, the submarginal band with sinuous edges; the marginal band broader, but the patch below apex smaller. Hind wing with speck at lower angle of cell, a faint dark-edged evenly sinuous postmedial band, a marginal lumulate band.

Hab. Sikhim, Khásis; Nilgiris, Ceylon; Tenasserim, Amboina

Exp 36 millim.

5066. Polythlipta peragrata, Moore, Lep. Atl. p. 216, pl. 7, fig 15, C & S no. 4195

Differs from esseals in the fore wing being broader, the apex less produced. Ground-colour pure white, the markings black, without any fulvous tinge, abdomen black, with dorsal white spots. Fore wing with the costa black; the postmedial band narrower from costa to vein 3, sending a spur enclosing a white spot to outer margin below apex and a curved spur to outer margin at vein 3, the marginal line broader. Hind wing with discocellular band; the postmedial band complete, straight and oblique from costa to vein 3, where it sends a spur to outer margin, the marginal line complete and developed into patches at apex and anal angle.

Hab. Sikhim. Exp. 40 millim.

5067 Polythlipta euroalis, P Z S 1889, p 420, pl 44, fig 12 Phalangiodes rivulalis, Snell Trans Ent Soc 1890, p 637, pl 20, figs 1, 1 a

Yellowish brown Fore wing with dark-edged antemedial white band from below costa to inner margin, a spot in cell; a discocellular band forming with a mark below the cell a Y-shaped band with its outer arm shortest, a postmedial spot below costa, a sinuous spot between vein 3 and inner margin, a band from costa before apex to vein 5, with another below it nearer the margin extending down to vein 3 Hind wing with diffused brown at base, followed by a broad white band, its outer edge angled outwards at vein 5 and with a dark-edged brown discocellular spot on it; the outer area yellowish brown, with black-edged sinuous white submarginal band bent outwards between veins 5 and 2.

Hab Sikhim, Assam, Burma, Sumatra; Java Exp. 30-34

millim

SECT. II Fore tibiæ and 1st tarsal joint in male not fringed with hair

5068 Polythlipta inconspicua, Moore, Lep Ath p 220, C & S.

Greyish fuscous, thorax marked with white, abdomen ringed with white Fore wing with medial, postmedial, and subapical white spots below costa; a medial spot below vein 2. Hind wing with the basal half white; the base and a large discocellular spot fuscous, the outer half fuscous, with sinuous inner edge and with white submarginal spots on vein 5 and near anal angle often present.

Hab Sikhim, Khásis. Exp 38 millim.

Genus LEPYRODES.

Lepyrodes, Guen Delt & Pyr p 277 (1854) Phalangiodes, Guen Delt & Pyr p 278 Nausinoe, Hubn Verz p 362 (? 1818), non descr

Type, L. geometralis, Guen

Range W. Africa, Oriental region, N Australia

Palpi obliquely upturned, the 2nd joint very broadly scaled in front, the 3rd porrect, maxillary palpi filiform, antennæ longer than the fore wing and almost simple; legs long and slender, the outer spurs about two-thirds length of inner. Fore wing with veins 3, 4, 5 normally from angle of cell; 7 straight and well separated from 8, 9, to which 10 is closely approximated Hind wing with the cell very short, the discocellulars straight, veins 3, 4, 5 normally from angle of cell; 6, 7 shortly stalked, 7 anastomosing with 8.

SECT. I (Phalanguodes). Fore legs of male with thick tufts of long hair on the tibiæ, the 1st joint of tarsus fringed with hair on both sides, mid and hind tibiæ fringed on both sides with short hair. Fore wing with veins 4, 5 from above angle of cell and slightly distorted. Hind wing with vein 3 from before angle of cell, curved downwards for a short distance, with a small streak of hyaline membrane above it, veins 4, 5 curved apart near origin, then approaching each other again, 7 curved downwards near origin.

5069. Lepyrodes neptis, Cram. Pap Exot. 111, pl 264, fig F, C & S. no 4329.

Pale yellowish brown or fuscous brown, palpi white below, abdomen banded with white. Fore wing with two black-edged white subbasal bands not reaching the costs, a spot in cell, a wedge-shaped mark on inner margin; a discocellular white band forming with a patch below the cell a Y-shaped band, with its outer arm shortest; two large black-edged white crescentic postmedial marks, a line from costs to vein 5, with another below it



Fig 196 —Lepyrodes neptus, of

nearer the margin extending down to vein 2. Hind wing with the basal area white, its outer edge angled at vein 5 and with a black-edged yellow-brown discocellular mark; the outer area yellow-brown, with a black-edged wedge-shaped submarginal mark from below costs to vein 2, and another further from the margin and with its outer edge indented from vein 5 to anal angle

Hab. Throughout India, Ceylon, and Burma; the Malayan sub-

region, Australia Exp. 32 millim.

Shor. II (Lepyrodes). Male with the fore tibes and 1st joint of tarsus fringed with long hair, but the tibes without the thick tufts, neuration normal, no hyaline streak between veins 3 and 4 of hind wing.

5070. Lepyrodes geometralis, Guen Delt & Pyr p. 278, pl 8, fig. 6, C. & S no 4870

Yellow, striated with black. Fore wing with two black-edged antemedial white spots below the cell, a spot at middle of cell and another at end of it; a larger spot below origin of vein 2; a small spot above vein 2 and large spot above vein 5, a submarginal line from below costs to vein 5, with another below it nearer the margin and extending down to vein 3; a large remiform spot near outer angle. Hind wing with subbasal white band, an antemedial spot between cell and inner margin; a large spot beyond the cell;

a submarginal spot from vein 6 to 3, a spot further from the margin below vein 3 and another from vein 2 to anal angle.

Hab. W. Africa; China; Formosa; throughout India, Ceylon,

and Burma; Java, Australia. Exp. 26 millim.

Genus ANALYTA.

Analyta, Led Wien ent Mon 1863, p 405

Type, A sigulalis, Guen.

Range W. Africa, NW. and W India, Borneo; Amboina.

Palpi with the 2nd joint upturned and moderately fringed with scales in front, the 3rd minute and porrect, maxillary palpi fillform, frons with a rounded prominence; antennæ of male thickened and flattened; tibiæ with the outer spurs two-thirds length of inner; abdomen with lateral tufts on terminal segments. Fore wing rather narrow; the apex somewhat produced and outer margin oblique; veins 3, 4, 5 from angle of cell, 7 slightly approximated to 8, 9; 10 approximated to 8, 9 Hind wing with the cell half the length of wing; veins 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8.

5071. Analyta sigulalis, Guen Delt & Pyr p 223, C & S. no 4291. Leucinodes heranicealis, Wlk Cat xvii, p 394

Analyta albicilalis, Led Wien ent Mon 1863, p 406, pl 14, fig 10

Leucinodes auxialis, Swinh P Z S 1886, p 458, pl 41, fig. 12. C & S no 4286.

Head and thorax black, palpi white below, abdomen white at



Fig 197.—Analyta sigulalis, 5

base, with a black band at middle and suffused with fuscous towards extremity. Fore wing with the basal area black, with traces of white subbasal and antemedial sinuous lines on it; the rest of the wings white; the medial area with slight dark marks on costa and in cell; an incomplete

oblique postmedial line, a large patch extending from vein 5 to inner margin, red above vein 2, black below it and with a minutely dentate line excurved round its outer side, the apical area fuscous with black specks on it. Hind wing white, with sinuous black postmedial and submarginal lines, the latter terminating at anal angle and with a black spot on it at vein 2; the apex fuscous.

ł

One specimen has vein 6 of hind wing forked on one side. Hab. Kulu; Mhow, Borneo, Amboina Exp. 22 millim.

5072. Analyta melanopalis, Guen Delt & Pyr p 224, C & 8 no 4288

Q. Differs from sigulals in the fore wing having the basal VOL. IV.

black area less extensive, the postmedial line reduced to a black mark on inner side of the postmedial patch, which has its upper part brighter red, its lower part whitish and fulvous, the line beyond it less excurved, the apical area white; a brown spot on margin below vein 2

Hab. Bombay Exp. 28 millim.

Genus LEUCINODES.

Leucinodes, Guen. Delt & Pyr p 221 (1854).

Type, L. elegantalis, Guen., from S. America.

Range Neotropical region, S. Africa, India, Ceylon, and

Burma: Malayan and Australasian subregions

Differs from Analyta in the 2nd and 3rd joints of palpi being considerably longer, the 1st joint with a tuft of forwardly projecting hair, antennæ slightly annulated and not thickened. Fore wing with vein 7 not approximated to 8; hind wing with the discocellulars highly angled; both wings with vein 3 from before angle of cell, 4, 5 well separated at origin, and the outer margin somewhat excurved or angulated at middle

5073. Leucinodes orbonalis, Guen Delt & Pyr p 223, Moois, Lep Ceyl m, pl 179, fig 9, Cotes, Indian Museum Notes, m, p 100 (larva), C & S no 4290 Pyenarmon discerptalis, C & S no 4315 (nec Wil.)

White; the head and thorax variegated with black and brown. Fore wing with the base fulvous, ferruginous, and black, followed



Fig 198
Leucinodes orbonalis, 5 }

by an incomplete sinuous black line; large fulvous orbicular and remiform patches with some black on their edges and almost extending to costa; a black-edged ferruginous triangular patch from lower angle of cell to inner margin with a sinnous line beyond it, a pale fulvous sinuous postmedial band not reaching costa, a sinuous

black submarginal line obsolescent towards outer angle and with a ferruginous and fuscous band beyond it, from below costs to vein 2; some black specks on margin. Hind wing opalescent, with black speck at upper angle of cell and spot at lower angle, an ill-defined postmedial black line nearly straight from costs to vein 3, then recurved and sinuous, some ill-defined pale fulvous submarginal patches and some black specks on margin.

Larva bores in the fruit of the 'Brinjal,' Solanum melongela Hab. S. Africa, throughout India, Ceylon, and Burma; Andamans; Java, Duke of York Island. Exp. 24 millim.

5074. Leucinodes diaphana, *Hmpsn. III* Het. viii, p 185, pl. 155, fig 11.

of abdomen being orange above. Fore wing with the outer edge of the black basal patch oblique and extending further along inner margin, no trace of postmedial line, the postmedial line regularly curved to outer angle, with rufous patch between it and lower angle of cell, a fuscous and grey patch on inner margin. Hind wing with no postmedial line, the submarginal line with diffused reddish fuscous on its inner edge, sending a spur to lower angle of cell and with no black spot at vein 2; the apical band extending to vein 2

Hab Nilgiris Exp 24 millim

5075. Leucinodes apicalis, n sp

The or of Pure white, head, thorax, and abdomen marked with black. Fore wing with the base black, indistinct antemedial and medial vellowish lines, a large apical black patch irrorated with a few grey scales and traversed by a pale sinuous line continued as a yellow line to outer angle. Hind wing with basal black specks, pale yellow discocellular spot, yellow postmedial line bent inwards at vein 2 to lower angle of cell and ending in a black spot on inner margin, a subapical black spot

Hab Dharmsála (Hocking), Ceylon (Green). Exp. 24 millim.

Type in B M

Genus CROCIDOLOMIA.

Crocidolomia, Zell K Vet -Ak Handl 1852, p 65 (1854). Godara, Wik Cat xix, p 808 (1859)

Type, C binotalis, Zell.

Range S Africa, Oriental and Australian regions

Palpi obliquely upturned, with tufts of hair at end of 1st and 2nd joints, the 3rd joint well-developed and obtuse; maxillary palpi dilated with scales at extremity, from rounded, antennæ of male thickened and flattened with appressed serrations; fore coxe of male very much enlarged, with a leaden-coloured semicircular hollow on inner side with large tufts of white hair on each side of it; mid tibiæ and the inner spur fringed on inner side with long hair, hind tibiæ with the outer spurs half the length of the inner, abdomen with dorsal tuft on 1st segment. Fore wing broad, a tuft of scales at middle of inner margin, male with a large tuft of hair on upperside from near base of costa recurved over the wing; underside with a fringe of hair below the cell; vem 3 from before angle of cell; 4, 5 well separated at origin; 10 separated from 8, 9 Hind wing of male with a large fovea on underside below the cell before origin of vein 2; the cell short; veins 4, 5 approximated for nearly half their length, 3 from angle of cell and approximated to them for a short distance; 6, 7 from upper angle, 7 anastomosing strongly with 8, which is highly sinuous.

2 B 2

- SECT I. Fore wing of male with the fringe of hair below the cell long and terminating in a tuft of long hair, no spines arising from it, hind wing with a membranous ridge at the end of the fovea.
- 5076. Crocidolomia binotalis, Zell K Vet-Ak Handl. 1852, p 66
 Pionea comalis, Guen Delt & Pyr. p 368; Moore, Lep Ceyl 111,
 pl 179, figs 2, 2 a, b (larva), C & S no 4176
 Pionea incomalis, Guen. Delt. & Pyr p 369

Pale ochreous; palpi banded with fuscous; thorax marked with ferruginous or fuscous. Fore wing more or less suffused in parts with terruginous and fuscous, male with the costal tuft ochreous and black; a double antemedial line highly dentate in and below cell; prominent dark-edged white spots at the angles of cell, a highly curved minutely dentate postmedial line, with a series of black specks on it and indistinct line beyond it, an indistinct minutely waved submarginal line; cilia leaden coloured at tips, the fringe of hair below median nervure ochreous. Hind wing semilyaline ochreous white; the apical area often more or less suffused with fuscous.

Larva pale violaceous brown with a paler dorsal stripe; two lateral series of black specks with a white line below them; a sublateral series of black specks, head red, 1st somite with a black dorsal band; less black Pupa red.

black dorsal band; legs black Pupa red.

Hab. S. Africa; Formosa, throughout India, Ceylon, and Burma; Java; Australia, Norfolk Island Exp. 26 millim.

- SECT. II. Male with a large subcostal vesicle at base of fore wing on underside, with a thick tuft of short hair from the subcostal nervure just beyond it, the fringe below median nervure much shorter and emitting four strong curved spines playing on the subcostal tuft, hind wing with a membranous bar given off from the end of the foves at origin of vein 2.
 - A. Fore wing of male with a slight tuft of long hair at end of the frings below the cell
- 5077. Crocidolomia suffusalis, Hmpsn. Ill Het vin, p 185, pl 155, figs 4, 12
- d. Differs from binotalis in the fore wing being usually much more uniformly suffused with reddish brown or fuscous, and often



Fig 199 — Crondoloma suffusali., 8. ?.

with a black medial patch between vein 2 and the inner margin, the fringe below median nervure fulvous. Hind wing usually

darker, with the apical dark area much more prominent and sometimes diffused nearly to anal angle

2 with the fore wing more uniformly suffused with fuscous.

Hab Sikhim, Nilgiris, Ceylon Eip 26-28 millim

B Fore wing of male with no tuft of long pale hair at end of the fringe below median nervure

- 5078. Crocidolomia luteolalis, Hinpsn Ill Het ix, p 168, pl 173, figs 4, 11
- d. Differs from binotalis in the fore wing being almost entirely suffused with bright ferruginous red, the fringe below median nervure dark rufous Hind wing ochreous, with the apical patch hlack
- 2 with the head, thorax, and fore wing uniform rufous brown, the last with the lines obscured, and the white spots minute Hab Ceylon. Exp 32 millim

Genus HELLULA.

Hellula, Guen Delt & Pyr. p 415 (1854).

Type, H undalis, Fabr.

Range. The tropical and warmer temperate zones

Palpi obliquely upturned and reaching vertex of head, the 1st and 2nd joints with tufts of scales at extremity, the 3rd well developed and obtuse; maxillary palpi filiform, from smooth; autennæ somewhat thickened, legs smooth, the spurs moderate and of even length Fore wing triangular, vein 3 from near angle of cell, 4, 5 from angle; 10, 11 free Hind wing with vem 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing with 8.

5079. Hellula undalis, Fabr Ent Syst 111, 2, p 226, Herr-Schäffer, Eur Schmett 1v, pl 8, fig 54, C & S no. 4518
Scopana alconalis, Will Cat xix, p 827 Leucinodes exemptalis, Wlk Cat xxxiv, p 1313

Grey and brown suffused with fuscous Fore wing with pale

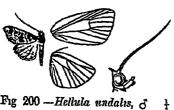


Fig 200 -Hellula undalis, of

dentate subbasal line; a dark antemedial line on a pale band excurved between subcostal and median nervures, a pale-edged dark discocellular lunule, a pale postmedial line excurved from vein 7 to 2, a pale apical spot and series of pale and dark marginal specks Hind wing pale, with

slight fuscous suffusion on apical area

Hab Mediterranean subregion, and throughout the tropical and subtropical zones, except the Neotropical and Australian regions. Exp. 20 millim

Genus FURCIVENA, nov.

Type, F strigiferalis, Hmrsn.

Range. Sikhim.

Palpi porrect, the 2nd joint fringed with scales below, the 3rd naked; maxillary palpi filiform; from flat and oblique; antennæ of male thickened and flattened; tabiæ with the outer spurs half the length of mner. Fore wing with vein 3 from angle of cell; 4, 5 stalked; 7 and 10 well separated from 8, 9. Hind wing with the cell about half the length of wing; vein 3 from angle; 4, 5 stalked, 6, 7 from upper angle, 7 anastomosing with 8.

5080. Furcivena strigiferalis, n. sp.

d. Bright ochreous; 3rd joint of palpi black. Fore wing with



Fig 201 Furcivena strigiferalis, d

the base of costa black; a prominent spot in base of cell; three less prominent spots on inner margin; a subcostal streak; two in cell, two in internomedian interspace, a prominent discocellular spot, and a curved series of postmedial black streaks in the interspaces not extending

to marginal area; a marginal black line extending round the apex. Hind wing pale fuscous; the cilia ochreous.

Hab Sikhim (Dudgeon). Exp 16 millim. Type in B. M.

Genus SAMEODES.

Sameodes, Snell Tyd v Ent xxIII, p 217 (1880) Pessocosma, Meyr. Trans Ent Soc 1884, p. 300.

Type, S cancellalis, Zell

Range. The tropical and subtropical zones.

Palpi rostriform, extending about the length of head and down-curved at extremity, the 3rd joint prominent, maxillary palpi filiform; frons rounded. Fore wing with vein 3 from just before angle of cell, 4, 5 from the angle Hind wing with the costalightly excised beyond the middle; veins 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing strongly with 8.

- SECT. I. Antennæ of male with long cilis and sinuous at middle; both wings with the apex somewhat produced.
- A. (Pessocosma) Male with the hind tibus not distorted, the outer spurs half the length of the inner, fore wing with no costal lobe.
- 5081. Sameodes peritalis, Wtk Cat xvii, p 466, Hinpsn Il Hetix, pl. 174, fig 21, C & S no. 4872

Differs from cancellalis in the hyaline markings of the fore wing

between veins 2 and 7 being reduced to a small spot above the base of vein 2 and a pair of spots between veins 5 and 7, the series beyond the postmedial line complete but small; cilia of both wings white at base, then with a black line through them, the tips chequered white and black.

Hat. Punjah, Nilgiris; Ceylon. Exp. 16 millim.

B. (Sameodes). Male with a swelling on the outer side of hind tibiae before the medial spurs, of which the outer is minute, the terminal spurs replaced by a small tuft of scales, the tibiae being bent beyond the middle; fore wing with a large medial costal lobe on upperside; hind wing with the costa excised before the middle as well as after.

5082. Sameodes cancellalis, Z&l. K. Vet-Al. Handl 1852, p. 34
Stenia pipleisalis, Wlk. Cat. xvii, p. 420, Moore, Lep. Ceyl. 111,
pl. 181, fig. 14, C & S no. 4238
Lepyrodes lepidalis, Wlk. Cat. xvii, p. 465, C. & S no. 4371.
Samea sidealis, Wlk. Cat. xix, p. 937.
Hymenia meridionalis, Wlk. Cat. xxxiv, p. 1314
Sameodes trithyralis, Snell. Tyd. v. Ent. xxiii, p. 218, & xxvii,
p. 134, pl. 8, fig. 4
Samea vespertinalis, Saalm. Ber. Senck. Ges. 1880, p. 301

Fulvous, abdomen tinged with white; male with -protrusible



Fig 202—Sameodes cancellalis, 3

black anal tuft. Fore wing with the costal lobe of male edged by curled black scales, a quadrate hyaline spot in cell and larger spots below middle and in end of cell; a series of large hyaline spots in the interspaces between veins 1 and

7, retracted below vein 1 and bisected by the sinuous postmedial line which is retracted along vein 2; four black marks on the costa towards apex. Hind wing hyaline, with dark speck in and another below cell; a discocellular dark-edged fulvous band narrowing below the cell, a waved postmedial line bent outwards between veins 5 and 2, where it is conjoined to the marginal fuscous-suffused fulvous band, and with a series of hyaline spots beyond it from costa to vein 2; both wings with marginal black line and the cilia black and white

Hab Throughout Africa, India, Ceylon, and Burma; Java, Australia; Fig. Exp. 22 millim.

SECT. II Antennæ of male filiform and minutely cliated; neither wing with the apex produced; hind wing of male with the cell very short, its upper part filled by a large hyaline fovea

5083. Sameodes miltochristalis, n. sp.

Yellow or fiery orange; patagas with a fuscous spot. Forewing

with a basal black spot, a highly curved antemedial band with black streaks inside it in and below cell, sometimes developed into a black patch, a black discocellular lunule, a postmedial line angled outwards to costs and beyond the cell, then incurved; a series of streaks beyond it often developed into a diffuse band: a very highly curved series of submarginal spots Hind wing with nearly straight postmedial series of fuscous streaks

Hab Sikhim, Khásis, Nágas; Tenasserim (Dokerty)
millim Type in coll Elwes.

26 millim

5084 Sameodes pictalis, Swinh A. M N H (6) xvi, p 303

2 Orange-yellow, palpi brownish above, abdomen reddish at base. Fore wing with the basal half suffused with fuscous, except the costal area, a hyaline spot in cell, a large hyaline discocellular spot with a larger triangular spot below it, a small hyaline speck on vein 5 beyond the cell, bright crimson suffusion on outer edge of the fuscous area beyond the cell, a minutely waved crimson postmedial line between veins 5 and 2, a pale fuscous curved submarginal band. Hind wing with the basal area suffused with crimson, dark annuli in and below end of cell, the latter with a hyaline spot beyond it, a crimson postmedial line bent outwards and waved between veins 5 and 2, a pale fuscous submarginal band

Hab Khásis. Exp 30 millim

Genus MEROCTENA

Meroctena, Led Wien ent Mon 1863, p 392

Type, M tullales, Wik

Range Indian, Ceylonese, and Malayan subregions

Palpi porrect, straight, the 2nd joint fringed above and below with hair, the 3rd prominent, maxillary palpi filiform, from rounded, antennæ of male unspectmate for one-third length, the basal joint emitting four teeth enclosing a hollow in front like the calyx of a flower; tibus of male with the outer spurs minute, abdomen with the anal tuft very large Fore wing with veins 3, 4, 5 from close to angle of cell, 7 approximated to 8, 9 for some distance, 10 also approximated to 8, 9 Hind wing with veins 3, 4, 5 from angle of cell, 6, 7 from upper angle, 7 anastomosing with 8

5085 Meroctena tullalis, Wik Cat xviii, p 649, Hmpsn Il Het. 1x, pl 172, fig 31, C & S no 4079

Bright yellow; palpi fulvous, white below Fore wing with indistinct subbasal line, oblique antemedial line, black speck in cell, and fuscous pale-centred discocellular lunule, a medial line from vein 2 to inner margin, a postmedial line from below costs to vem 5, a highly sinuous submarginal line with



Fig 203 —Meroctena tullalis, d

the area beyond it rufous. Hind wing with discocellular lunule, indistinct postmedial line strongly bent outwards between veins 5 and 2, below which it is diffused, a rufous apical patch and dark streak towards anal angle, both wings with a black line at

base of cilia, which are pure white with black points

Hab Sikhim, Assam, Nilgiris, Ceylon, Burma Pulo Laut, Java; Amboina Exp 38 millim.

Genus THLIPTOCERAS.

Thliptoceras, Swinh Trans Ent Soc 1890, p 274 Prophantis, Warr A M N H (6) xviii, p 113 (1896)

Type, T. cascale, Swinh

Range S Africa, Japan, Indian, Ceylonese, and Malayan sub-

regions to N Australia

Palpi porrect, straight, and about twice the length of head, the 2nd joint fringed above and below with hair, the 3rd prominent, maxillary palpi filiform, from rounded, hind tibize with the outer median spur minute. Fore wing produced at apex; the outer margin oblique, veins 3 and 5 from close to angle of cell, 7 well separated from 8, 9. Hind wing with the cell short, the discocellulars produced along vein 4, which is approximated to 5; 6, 7 stalked, 7 anastomosing strongly with 8

SECT. I (Thisptoceras) Antennæ of male with two curved teeth on basal joint forming an upturned cavity, the basal part of the shaft curved, then expanded into a cavity formed of short appressed pectinations.

5086. Thirptoceras cascale, Swinh Trans Ent Soc 1890, p 271, pl 8, fig 18
Thirptoceras variabilis, Swinh Trans Ent Soc 1890, p 274,
Hmpsn Ill Het viii, pl 156, figs 2-10
Circobotys phycidalis, Snell Trans Ent Soc 1890, p 599



Fig 204
Thliptoceras cascale, & 1.

3 Bright straw-colour. Fore wing with indistinct slightly sinuous antemedial erect line; a discocellular speck; a postniedial minutely waved line slightly curved from costa to vein 3, then retracted to origin of vein 2 Hind wing with oblique postmedial line

2 with the fore wing broader and less produced at apex.

A variety has the whole of the wings suffused with fuscous, leaving the costa of fore wing and cilia of both wings yellow Hab Japan; Dharmsála; Sikhim, Bombay; Nilgiris, Ceylon; Rangoon. Exp 24 millim.

SECT II Antenne of male with the basal joint excised and with slight tuft of hair from inner side, forewing less produced at apex, the costa highly arched before middle hind wing with the inner area clothed with long hair, patagia extending beyond metathorax.

5087 Thliptoceras stygiale, n sp

o. Uniform black-brown, palpi below, pectus, and abdomen below white Fore wing with faint traces of postmedial line excurved from costa to vein 3, then retracted to below end of cell, hind wing with traces of obliquely curved postmedial line Hab. Nágas (Doherty) Exp 26 millim Type in coll Elwes.

SECT III. (Prophantis) Antennæ of male ciliated

5088 Thirptoceras octoguttale, Fild Ress Nov pl 135, fig 38, C & S no 4122
Pyralis smaragdina, Butl. A. M N H (4) xvi, p 411

Head and thorax purplish brown, abdomen fulvous, the anal tuft orange Fore wing purplish brown, a hyahne dark-edged speck in cell, two obliquely placed medial spots and a spot beyond the cell, each with an orange spot on the costa above it, the costa orange at apex, a marginal orange band, narrow from costa to vein 5, then broad and narrowing to outer angle Hind wing purplish brown, with indistinct waved medial line and marginal orange band, broad and with a purplish spot on it at apex and narrowing to anal angle.

Hab Natal, Sikhim, Sibságar, Nilgiris, Ceylon, Borneo,

Amboina, Australia Eap 22 millim.

Genus ARCHERNIS

Archernis, Mey: Pr Linn Soc N S W (2) 1, p 254 (1887) Protonoceias, Wair A M N H (6) vi, p 475 (1890) Metoportha, Mey: Trans Ent Soc 1894, p 463

Type, A callexantha, Meyr, from the Malayan region and New Guinea

Range Formosa, India, Ceylon, and Burma, Malayan sub-

region to New Guinea.

Palpi porrect, long and straight, the 2nd joint fringed with har below, the 3rd joint prominent, maxillary palpi long and slightly dilated with scales, from rounded, tibize with the outer spurs half

the length of the inner. Fore wing with the apex acute, veins 3 and 5 from close to angle of cell, 10 closely approximated to 8,9. Hind wing with the cell short, the discocellulars erect; veins 3, 4, 5 radiating from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

SECT I. (Protonoceras) Male with a tuft of forwardly-directed hair between the antennæ, antennæ with the basal joint dilated, the shaft given off from its outer side, much bent near base, then with some small serrations on inner side and with long cilia.

A. Antennæ of male with a long curved tuft of hour from the inner side of basal joint, the tuft between the antennæ long

5089. Archernis tropicalis, Will Cat xviii, p 670, Moore, Lep Ceyl ui, pl 181, fig 9, C & S no 4276

Fuscous · palpi white below at base, from and basal joint of



Fig 205 — Archernis tropicalis, &

antennæ white. Fore wing with curved dark antemedial line, a prominent dark-edged white discocellular lunule; a sinuous postmedial line excurved from costa to vein 2, where it is bent inwards, then out again, slightly outlined with white and by a prominent

white patch from costa to vein 6, cilia tipped with white except at middle Hind wing with discocellular dark lunule with white spot on its outer side, a white-edged postmedial line bent outwards between veins 5 and 2, the cilia white-tipped except at apex and middle Underside entirely suffused with white

Hab Formosa; Dharmsala, Sikhim, Bombay; Nilgiris, Ceylon.

Tenasserim. Exp 22-30 millim

B. Antennæ of male without the curved tuft from basal joint, the frontal tuft less developed.

5090. Archernis dolopsalis, Wil Cat xviii, p 692 Protonoceras fuscilunalis, Hmpsn Ill Het viii, p 134, pl. 155, fig 22

Differs from tropicalis in the forewing having a dark spot in the cell and dark discocellular lunule; hind wing with no white spot

beyond the discocellular lunule.

The typical male form from Ceylon and Borneo has the frontal tuft rufous and more developed than in the Nilgiri form fuscilunalis, and on the fore wing has a white spot between the two cell-spots

Hab. Nilgiris; Ceylon, Burma; Borneo. Exp. 26-34 millim.

SECT. II. (Archerns) Antenna of male normal.

5091 Archerms humilis, Swinh A M N. H (6) xiv, p 146.

d Grey suffused and irrorated with fuscous brown; palpi white below. Fore wing with indistinct oblique slightly sinuous dark antenedial line, an indistinct dark discocellular speck, both wings with a dark postmedial line slightly excurved below costs and more so between veins 5 and 2, then retracted to below end of cell, a marginal series of dark specks and dark line through the cilia Underside grey, with the marginal line reduced to specks Hab. Khásis, Nágas Exp. 20 millim

5092. Archernis nictitans, Swinh A. M. N H. (6) xiv, p 146

of Ochreous grey-brown; palpi white below, from white Fore wing with white discocellular spot with black marks on each side of it, both wings with a minutely dentate postmedial line bent outwards between veins 5 and 2, a marginal series of dark specks and fine pale line at base of cilia. Underside whitish, with discocellular black specks; the postmedial line reduced to specks.

Hab Khásis Exp. 20 millim

5093. Archernis obliquialis, n sp

d. Pale ochreous and brown. Fore wing reddish brown irrorated with black, the costal and inner areas pale ochreous, a pale ochreous oblique subbasal wedge-shaped band below the cell and an oblique antemedial band; two oblique lines from apex diverging towards inner margin and a marginal line, two fine black lines through the cilia. Hind wing fuscous, pale at base and with traces of pale postmedial line.

Hab Sikhim (Pilcher). Exp 16 millim. Type in B M

Genus TERASTIA.

Terastia, Guen Delt. & Pyr p 211 (1854).

Type, T meticulosalis, Guen.

Range Neotropical and Oriental regions
Palpi porrect and triangularly scaled, the 3rd joint hidden by
hair; maxillary palpi filiform, frons flat, antennæ of male chiated;
fore table fringed with long hair; mid and hind table with the
outer spurs about half the length of the inner, abdomen of male
with lateral tufts on the last three segments, the anal tuft long.
Fore wing long and narrow; the costa arched towards apex,
which is produced, the outer margin excurved at middle, the
inner margin excised before outer angle, which is lobed, vein 3
from close to angle of cell; 4, 5 somewhat approximated for a
short distance; 7 curved and approximated to 8, 9 Hind wing
ample; the costa highly excised before and after middle, lobed at

middle and towards apex; veins 4, 5 somewhat approximated for a short distance, the discocellulars erect; veins 6, 7 from upper angle, 7 touching 8, but not anastomosing with it

5094 Terastia meticulosalis, Guen Delt & Pyr p 212
Terastia subjectalis, Led. Wien ent Mon. 1863, p 480, C & S.
no 4285
Megaphysa quadratalis, Wilk Cat. xxxiv, p 1527

Pale fawn-colour. Fore wing with the basal area slightly suffused with rufous; a pale oblique antemedial bar from the costa with a dark spot on its outer side, and bounded by an inwardly-oblique hyaline band from below costa to vein 1, a prominent oblique rufous medial band with a semihyaline patch beyond it, a rufous discocellular limitle; a pale oblique bar with dark inner edge from costa before apex, continued as a band



Fig 206 — Terastia meticulosalis, of

formed of three waved lines to inner margin; a rufous line close to the margin. Hind wing hyaline; the costal lobe fuscous, the apical area suffused with ochreous and rufous, postmedial and submarginal curved lines obsolete from vein 3 to inner margin, a line close to the margin.

Larva bores in young stems of Erythrina.,

Hab St Domingo, Honduras; Ceylon, Java, Philippines

Exp 38 millim

5095. Terastia egialealis, Wik Cat xvii, p 383, C & S no 4294
Terastia proceralis, Led Wien ent Mon 1863, pp 416, 480
Agathodes diversalis, Wik Cat xxxiv, p 1307
Negaphysa quadriferalis, Wik Cat xxxiv, p 1528

Differs from meticulosalis in the colour being bright ferruginous Fore wing with the inner area and apex suffused with golden yellow, no antemedial bar; the hyaline band erect and inwardly edged by a waved black line, the medial rufous band figure-of-8-shaped, the hyaline patch in the cell quadrate; the inner edge of the subapical band black, then reduced to specks below vein 6 Hind wing with the costal lobe black, the postmedial line reduced to black specks.

Hab. Dharmsála; Sikhim; Java Exp 40-54 millim.

Genus OMPHISA.

Omphisa, Moore, Lep Ceyl 111, p 317 (1886).

Type, O anastomosalis, Guen.

Range China; Indian, Ceylonese, and Malayan subregions to Duke of York Island.

Palpi porrect and straight, the 2nd joint fringed with hair below, the 3rd prominent, maxillary palpi large; frons rounded, antenus of male moderately chiated; patagia clothed with large scales; tabis with the outer spurs about half the length of the inner, the mid tabis clothed on the outer side with spinous hair; abdomen with large lateral tufts on the last five segments. Fore wing with the costa arched towards apex which is acute, the outer margin excurved at middle; veins 3 and 5 from close to angle of cell. Hind wing with the costa slightly excised beyond the middle, the apex somewhat produced; the outer margin excurved at middle, the inner margin short, veins 4 and 5 approximated for a short distance; 6, 7 from upper angle, 7 touching 8, but usually not anastomosing with it.

5096. Omphisa anastomosalis, Guen Delt & Pyr p. 373
Botys illisalis, Wilk Cut xviii, p 653, Moore, Lep Ceyl iii,
pl 183, fig 4, C & S no 4107.

White; the head, thorax, and abdomen suffused with ochreous and rufous, leaving some paired pale spots on dorsum. Fore wing with rufous suffusion on basal area extending below median



Fig 207.
Omphisa anastomosalis, 5. \ftarrow.

nervure to middle of wing; hyaline patches at middle and end of cell, with a rufous-edged ochreous spot between them; a large rufous-edged ochreous patch beyond the cell; the outer area more or less irrorated and suffused with rufous; the veins rufous, a curved postmedial rufous line with an ir-

regularly dentate line beyond it enclosing a series of hyaline patches; a marginal rufous line. Hind wing with the base rufous, a dark-edged rufous irregular discocellular mark with line from it to inner margin, the outer area irrorated with rufous; two irregularly waved rufous postmedial lines, the apex, anal angle, and a marginal line rufous.

Hab China; Sikhim; Khásis; Nilgiris; Ceylon, Burma; Andamans; Java; Duke of York Island. Exp. 32-36 millim.

5097. Omphisa repetitalis, Snell. Trans. Ent. Soc 1890, p. 621, pl. 19, figs 6, 6 a.

d. Differs from anastomosalis in the cilis of both wings being streaked with fuscous at veins 3, 4 only; hind wing with apical black patch suffused with leaden grey from costs to vein 4,

continued as a black line to vein 1 c; cilia with their bases black from apex to vein 4.

Hab. Sikhim. Exp 42 millim.

Genus ISCHNURGES.

Ischnurges, Led. Wien. ent Mon 1863, p 418 Nesolocha, Meyr Trans Ent Soc 1886, p 239 Rhectothyris, Warr A M N H (6) vi, p 474 (1890)

Type, I illustralis, Led., from New Guinea Range Oriental region, New Guinea

Differs from Pyrausta (p 429) in the antennæ being four-fifths the length of the fore wing and annulated with raised rings at each joint, tibiæ with the outer spurs half the length of the inner.

5098 Ischnurges gratiosalis, Wlk Cat xvii, p 357, Hmpsn Ill Het ix, pl 173, fig 12, C & S no 4246 Asopia roridalis, Wlk Cat xvii, p 371, C & S no 4251

Head, thorax, and abdomen clothed with pink, yellow, and white scales; palpi white below Fore wing bright yellow, with pink suffusion on basal costal area, an obliquely sinuous antemedial line with a hyaline speck beyond it in the cell, a pink-



Fig 208 Ischnurges gratiosalis, & }

edged hyaline spot in end of cell with a larger spot below it, connected with the inner margin by a line, both spots with pink and dark suffusion on their inner edges and between them and the postmedial series of pink-edged hyaline spots, which consist of a bifid spot

below the costs and quadrifid spot beyond the cell; the veins of outer area, the margin, and area near outer angle pink. Hind wing yellow, with a hyaline spot below middle of cell on a pink patch, a large pink-edged dentate hyaline patch beyond the cell, the outer area suffused with pink, a pink marginal band. Underside with the ground-colour white.

Hab N China; Sikhim, Nilgiris, Travancore; Ceylon; Pulo Laut, Borneo. Exp 24-30 millim

5099 Ischnurges rosea, Warr A M N H (6) xvu, p 142

d. Orange-yellow suffused with crimson, head yellow, palpi black above Fore wing with series of black specks on costa, some fuscous suffusion below basal part of costa; an indistinct obliquely smuous antemedial crimson line, an elongate fuscous annulus in cell and large dark discocellular spot Both wings with a fine sinuous crimson postmedial line retracted at vein 2 to angle of cell, then somewhat excurved again, at vein 2 conjoined to a purplish crimson submarginal band.

Hab. Khásis. Exp. 16 millim.

- 5100 Ischnurges rufalis, Hmpsn Ill Het ix, p 163, pl 172, fig. 28.
- 5 Ferruginous red, palpi dark rufous Fore wing with the costal and outer margins black, an indistinct sinuous ferruginous antemedial line, a black discocellular lunule, a sinuous ferruginous postmedial line excurved between veins 5 and 2 Hind wing with an indistinct oblique ferruginous postmedial line terminating on vein 2, the outer margin black, both wings with the cilia white at tips

Hab. Ceylon Erp 12 millim.

- 5101 Ischnurges argentealis, Hmpsn Ill Het 1x, p 163, pl 178, fig 16
- d Head orange, palpi white below; from with lateral white stripes, thorax yellowish white, with four orange stripes, abdomen white, with dorsal orange stripe. Fore wing orange, the inner area pale yellow, a fuscous subcostal streak conjoined to the large fuscous reniform discocellular mark, an orange patch on inner margin near base, an extremely oblique orange line crossing the inner area, the postmedial line straight from the costa to vein 3, then recuived to origin of vein 2 and bent out again; a leaden fuscous submarginal band, wide below the costa. Hind wing with orange fasciæ along veins 2 and 3 conjoined to an oblique postmedial line, an orange fasciæ along vein 1 b; an orange-edged leaden fuscous marginal band from vein 6 to 2. Underside whitish

Hab. Ceylon Exp 24 millim

- 5102. Ischnurges luteomargmalis, *Hmpsn Ill. Het* viii, p. 134, pl 155, fig. 18
- d. Orange-yellow, palpi fulvous, white below, abdomen ringed with white. Fore wing with the costal area suffused with fuscous, an indistinct antemedial line, outwardly oblique from costa to median nervuie, a black-edged white discocellular spot; the postmedial line nearly straight from costa to vein 2, then recurved to lower angle of cell and bent outwards again, the area beyond it fulvous. Hind wing with curved antemedial and nearly straight postmedial diffused lines, the area beyond the latter fulvous.

Hab Nilgiris Eap 18 millim

- 5103 Ischnurges angustalis, Hmpsn Ill Het ix, p 178, pl 172, fig 20
- of Ochreous; palpi black above, thorax suffused with fuscous Fore wing very narrow, suffused with fuscous except on inner area, a large remform medial ochreous spot in end of cell extending down to vein 1 and connected with inner margin by a black line, an ochreous discocellular lunule, a large postmedial ochreous remform spot extending from costa to vein 2.

Hind wing semihyaline, with a black discocellular line; the postmedial line near the margin excurved between veins 5 and 2, then obsolete, fuscous patches at apex and anal angle

Hab. Ceylon, Tenasserim. Eap 20 millim.

Genus ISOCENTRIS

Isocentris, Meyr Trans Ent Soc 1887, p 232 Leucocraspeda, Warr A M N H (6) vi, p 475 (1890)

Type, I. filalis, Guen.

Range. Mauritius; Oriental region to N Australia

Differs from Pyrausta in the tibiæ having all the spurs long and equal.

5104 Isocentris phænicozona, n sp

Differs from filals in being pale yellow; abdomen with some crimson at base and extremity. Fore wing with some crimson on base of costa; no crimson patch at end of cell; the postmedial and submarginal lines of both wings hardly waved, the marginal band crimson, the cilia yellow, with crimson bases and patches at middle and anal angle of each wing.

Hab. Khásis; Nágas (Doherty). Exp. 20 millim Type in B. M.

5105. Isocentris filalis, Guen Delt & Pyr p 204, Snell Tyd v Ent. xxvi, p 131, pl vii, figs 11, 11 a

Endotricha rhodophilalis, Wik Cat xxxiv, p 1311, Moore, Lep.
Ceyl iii, pl 178, fig 13, C & S no 4250

Botys amenalis, Wik Cat xxxiv, p 1445

Botys auralis, Snell Tyd v Ent 1872, p 90, pl 7, figs. 9, 10

Samea dives, Bull P Z S 1880, p 682

Orange-yellow. Fore wing with some dark suffusion at base; indistinct sinuous antemedial and medial lines, the latter with a pink and purple patch beyond it on discocellulars conjoined to one below lower angle of cell; a postmedial highly sinuous line bent



Fig 209
Isocentris filalis, &.

inwards along vein 2 to the purple patch; a highly waved submarginal line with a purplish-pink band on its outer edge, a waved line close to the margin. Hind wing with dark discocellular lunule; a highly sinuous postmedial line very much bent inwards along vein 2

and then excurved again; a sinuous submarginal line with a purplish-pink band on its outer edge, a waved line near the margin, which is fulvous; both wings with black line at base of calla, which are pure white

The form *rhodophilalis* has the line through base of cilia crimson

Hab Mauritius; Formosa, Sylhet, Bombay, Coimbatore; Ceylon; Burma, Java; Celebes, Australia Exp. 22 millim

- 5106. Isocentris æqualis, Led Wien ent Mon 1863, p 468, pl 10, fig 3
 Isocentris undulinéa, Hmpsn Ill Het viii, p 132, pl 154, fig 21.
- d. Fulvous, abdomen tinged with white. Fore wing with black basal speck, a curved black antemedial line, a discocellular black lunule on a diffused fuscous patch; a minutely waved postmedial line highly excurved between veins 6 and 3, then bent inwards at vein 2 and excurved again. Hind wing suffused with fuscous to the postmedial line, which is bent inwards at vein 2, then outwards again. Both wings with a minutely waved curved submarginal line, with the area beyond it pinkish; a black line at base of calia, which are fuscous at vein 3 of fore wing, elsewhere pure white.

Hab Sikhım; Khásıs, Nilgırıs; Ceylon, Burma, Celebes. Exp. 18 millim

5107. Isocentris comostolalis, Snell Trans Ent Soc 1890, p 582
 Leucocraspeda udeoides, Hmpsn. Ill Het viii, p 184, pl 155, fig 17
 Hyalobathra dialychna, Meyr Trans Ent Soc 1894, p 7

Ochreous suffused with fuscous. Fore wing with indistinct dark curved antemedial line; a large fuscous discocellular patch with a highly waved line from it to inner margin, a postmedial line outwardly oblique from costa to vein 5, then minutely waved to inner margin; a minutely waved submarginal line, the apical area from beyond the postmedial line golden orange. Hind wing with indistinct dark patch at lower angle of cell, curved indistinct postmedial and submarginal minutely waved lines; both wings with the cilia black at base, pure white at tips.

Hab. Sikhim; Khásis, Nilgiris, Shan States. Exp. 26 millim.

5108. Isocentris unicolor, Warr A M N H (6) xvi, p 472

Fawn colour. Fore wing with some ferruginous marks on basal inner area, an obliquely curved fine antemedial line, dark at costa, then ferruginous, a slight discocellular line; a fine postmedial line, dark and very oblique from costa to vein 5, then waved, obsolescent, and at vein 2 retracted to below angle of cell. Hind wing with fine dark minutely waved postmedial line, retracted at vein 2 to below angle of cell, then excurved again. Both wings with minutely waved black line just inside the margin, a black marginal line; the cilia pure white. Underside with the postmedial and submarginal lines represented by series of black specks.

Hab. Nágas; Perak; Baram, Borneo; Queensland. Exp. 28

millim.

5109 Isocentris opheltesalis, Wlk. Cat xix, p. 1010, C. & S. no 4345 (part) Hedylepta contubernalis, Moore, Lep Atk p. 208. C. & S

Orange-yellow, fore tars: banded with white. Fore wing with curved antemedial line, a postmedial line outwardly-oblique from costs to vein 5, then excurved to vein 2, along which it is retracted and sinuous to inner margin Hind wing with a minutely waved postmedial line bent outwards between veins 5 and 2, both wings with the cilia black at base, pure white at tips.

Hab Punjab, Pareshnáth, Moulmein; Nilgiris. Exp. 22 millim.

5110. Isocentris illectalis, Wik Cat xviii, p 658; Hmpsn. Ill. Het. ix, pl 173, fig 9, C & S no 4345 (part) Botys albofimbrialis, Snell Tyd v Ent xxvi, p. 128 Botys niveicilialis, Snell Midd-Sum, iv, Lep p 64.

2. Differs from opheliesalis in being fulvous. Fore wing with a discocellular line; both wings with a minutely waved submarginal line

Hab Sikhim, Nágas; Ceylon; Rangoon; Shan States,

Borneo; Celebes Exp 24 millim.

5111. Isocentris miniosalis, Guen Delt & Pyr. p 362
Ebulea europsalis, Wik Cat xviii, p 749, C & S no 4184
Ebulea orseisalis, Wik Cat xviii, p 749

Crimson. Fore wing with a deeper crimson basal patch; a curved deep crimson antemedial line; a discocellular spot; both wings with a postmedial line oblique from costa to vein 6, then highly excurved to vein 3, where it is retracted; a curved submarginal line; the veins near margin and a marginal line deep crimson; cilia whitish at tips

Hab. 'N. India'; Nilgiris; Rangoon, Ceylon; Shan States.

Exp. 28 millim.

Genus CROCIDOPHORA.

Crocidophora, Led Wien ent Mon 1863, p. 386 Circobotys, Butl Ill Het in, p 77 (1879)
Chobera, Moore, Lep Atk p 219 (1888).
Mimocomma, Warr A M N H (6) xvi, p 473 (1895).
Monocrocis, Warr. A M N H (6) xvi, p 475
Polychorista, Warr A M. N H (6) xvii, p 109 (1896).

Type, C. tuberculahs, Led, from N. America.

Range N. America; W. Africa; Japan; Oriental region and

Australasian subregion.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform; frons flat and oblique; antennæ of male four-fifths length of fore wing and minutely ciliated, hind tabiæ with the outer spurs minute; abdomen of male long, the claspers and anal tuft large. Fore wing more or less produced at

- apex, the outer margin oblique; veins 3 and 5 from near angle of cell. Hind wing with the cell short, the discocellulars being produced along vein 4 and veins 4 and 5 approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8
- SECT. I. (Circobotys). Fore wing with the apex greatly produced and subfalcate.
- 5112. Crocidophora limbata, Moore, Lep Atk p 220, pl 7, fig. 24; C & S no. 4123
- o. Red-brown, palpi white below; abdomen ochreous at base and extremity. Fore wing with the costa white for three-fourths length, with a yellow fascia below it, the outer margin bright yellow. Hind wing fuscous with a rufous tinge, the costal and inner areas whitish, the margin bright yellow from apex to vein 2. Hab. Sikhim; Bhután. Exp. 34 millim
- 5113 Crocidophora pallida, Moore, Lep. Atk p 220, C & S no 4163.
- o. Only differs from sinisalis in the apex of fore wing being greatly produced and subfalcate
 Hab. Khásis, Calcutta Exp. 32 millim
 - SECT. II. Fore wing with the apex less produced and not subfalcate.
 - A. Antennæ of male not knotted and contorted or excised
 - a. Fore wing without large fans of scales on under side below median nervure and beyond upper angle of cell
- 5114. Crocidophora sinisalis, Wil. Cat xvin, p 635
- J. Straw-colour suffused with fuscous; palpi fulvous, white below. Fore wing with the base and costa slightly tinged with fulvous; traces of an obliquely sinuous antemedial line; an obscure speck in cell and discocellular mark; a faint postmedial line curved from costa to vein 4, then retracted along median nervure to origin of vein 2 and dentate to inner margin, the marginal area slightly darker. Hind wing yellowish semihyaline fuscous, with traces of a waved postmedial line, both wings with the cilia white at tips
 - Hab. Congo; Punjab. Exp. 30 millim.
- 5115. Crocidophora fuscalis, Hmpsn. Ill Het vni, p. 188, pl. 154, fig 14.
- d. Differs from sinisals in the fore wing being somewhat broader; the costa ochreous; the cilia pale yellow; the rest of the wing darker fuscous without trace of markings Hind wing darker fuscous without trace of markings; the cilia pale yellow.
 - Hab. Nilgiris. Exp. 32 millim.

5116. Crocidophora stenophilalis, Wlk Cat xxxiv, p 1407 Circobotys marginalis, Hmpsn. Ill Het viii, p 133, pl. 155. fig 9 (2)

Differs from epicrocalis in being pale orange-yellow. Fore wing without antemedial line, the postmedial line nearly straight from costa to vein 3; the marginal area only slightly tinged with fuscous from apex to vein 2 of hind wing, which has the postmedial line straight and oblique

Hab Nilgiris; Cambodia Exp. 26 millim.

- 5117 Crocidophora acutangulalis, Swinh A M. N H (6) xiv p 143.
- d. Bright yellow, palpi orange, white below and dark at tips; the vertex of head dark, abdomen ringed with white, a white and black dorsal spot on terminal segment. Fore wing very narrow with the apex acute, the costa fuscous brown; an oblique orange antemedial line, a dark discocellular lunule with orange line from it to inner margin, a dark postmedial speck on costa, with orange line from it to vein 4, the outer area purplish fuscous and wide at apex. Hind wing with very oblique orange line meeting an oblique postinedial line at vein 2, the outer area purplish fuscous from apex to vein 2

Hab Sikhim, Khasis, Margharita, Assam Exp. 24-30

millim.

- b. Fore wing broader, male with the retinaculum formed by a very large fan of leaden-coloured scales from below median nervure, the median nervure bent upwards
- a'. (Crocidophora) Fore wing with a large fan of leaden-coloured scales beyond upper angle of cell and vein 7 bent downwards.

5118 Crocidophora ptyophora, n sp.

Fulvous orange, palpi white below; abdomen ringed with white, the anal tuft tipped with white. Fore wing bright yellow; the costal area fulvous suffused with fuscous; the fans of leaden



Fig 210 Crocidophora piyophora, o

scales showing through to the upperside, a sinuous orange antemedial line, a postmedial line straight from costa to vein 3, then retracted to origin of vein 2, and outwardly oblique to inner margin; a broad purplish-fuscous marginal band. Hind wing bright yellow, with orange fascia

along median nervure met at vein 2 by an oblique postmedial line from the costa; a broad marginal purplish-fuscous band and series of marginal black specks from apex to vein 2

Hab. Sikhim (Dudgeon); Tenasserim (Doherty). Exp. 30 millim. Type in B M

- 5119. Crocidophora amonalis, Snell Trans. Ent Soc 1890, p 598
- o. Differs from ptyophora in the fan of scales below median nervure of fore wing being short and not extending below origin of vein 2. Head, thorax, and abdomen more rufous. Fore wing suffused with rufous to end of cell and below it to the postmedial line, the inner edge of the dark outer area denticulate between veins 2 and 4. Hind wing suffused with rufous to the postmedial line, the inner area greyish fuscous

Hab. Sikhim Exp. 30 millim

5120 Crocadophora limbolalis, Moone, P. Z S 1877, p 615, C & S. no 4256

Differs from acutangulals in the fore wing being broad and slightly produced at apex, the basal costal area reddish, the discocellular lunule orange, the marginal band of both wings broad and reddish purple in tone with orange on its inner edge, excurved between veins 2 and 4 of fore wing, which has the margin and cilia orange; hind wing with the marginal black specks prominent

Larva a leaf-roller, and feeds on Antiaris toxicaria

Hab Bhután, Momert, Burma, Tenasserim, Andamans. Exp. 20 millim.

- 5121. Crocidophora fulvidalis, Warr A M. N H (6) xvi, p 475 Lepidoplaga uniformis, Warr A M N. H. (6) xvi, p 476
- d. Bright orange; palpi white below. Fore wing with traces of sinuous antemedial line, dark foveas below and beyond cell, a post-medial line slightly curved from costs to vein 2, then retracted to angle of cell and obliquely waved to inner margin, an obliquely curved diffused submarginal line. Hind wing with oblique post-medial line ending on vein 2; a submarginal line terminating on margin at vein 2.

The form uniforms is pale yellow.

Hab. Khásis Exp. 22 millim

- 5122. Crocidophora multidentalis, Warr A M N. H. (6) xvi, p 476
 - d Differs from distinctales in being pale ochreous Hab. Khásis. Ecp. 32 millim.
- b'. (Monocrocis) Fore wing with a small postmedial glandular swelling on the costa, and an elongate groove of almost unscaled ribbed membrane above vein 7.
- 5123. Crocidophora lutusalis. Snell Trans Ent. Soc 1890, p 597
- d. Ochreous brown, head and abdomen more fuscous, palpi white below, frons with lateral white stripes. Fore wing with faint traces of a postmedial line excurved from vein 5 to 2, along which it is bent inwards, the marginal area slightly darker.

Hind wing with traces of an oblique postmedial line retracted along vein 2, the marginal area slightly darker from apex to vein 2

Hab Sikhim, Bhután, Canara Exp 34 millim

5124. Crocidophora flavofasciata, Moore, Lep Ath p 223, pl. 7, fig 19, C & S no 4092

Head and thorax dull rufous, abdomen fuscous, the segments ringed with white. Fore wing dull rufous, with a postmedial straw-coloured band from subcostals of fore wing to vein 2 of hind wing, where it is bent inwards and becomes obsolescent, the edges of the band minutely dentate, the inner side toothed on vein 2 of fore wing, the outer margin ochreous with a series of dark specks; the costal and inner areas of hind wing paler

Hab Sikhim, Khásis Exp 32 millim

c' Fore wing of male without serval characters beyond the cell

5125 Crocidophora evenoralis, Will Cat xix, p 1012 Botys mandarinalis, Leech, Entom 1889, p 68, pl 3, fig 14

Differs from ptyophora in the fan below median nervure being intermediate in length between it and amænalis, abdomen rufous, with prominent white dorsal bands. Fore wing with the costal area prominently rufous, the postmedial line oblique, curved from costa to vein 2, then dentate; the marginal band half the width Hind wing with the basal area fuscous to the postmedial line, which is much less produced along vein 2, the marginal band on apical area much narrower

Hab Japan, China, E Pegu Exp 26 millim.

5126. Crocidophora pionealis, Snell Trans Ent Soc 1890, p 624

d. Pale fulvous; palpi white below at base. Fore wing with black speck below middle of cell and black discocellular speck, an indistinct postmedial line arising from black spot on costa, excurved to vein 3, then bent inwards to below end of cell and with a black spot on it above vein 1, a marginal series of black specks. Abdomen and hind wing whitish, the latter with marginal series of black specks

Q with the apex of fore wing less produced Hab. Sikhim, Núgas Lup, ♂ 30, ♀ 26 millim

5127 Crocidophora fasciata, Moore, Lep Ath p 223, pl 7, fig 20, C & S no 4090

Duli rufous with a purplish tinge, palpi fulvous, white below, abdomen ringed with white, fulvous towards extremity, wings with a postmedial orange-yellow band, wide on disk of fore wing, narrowing to co-ta and inner margin, on hind wing wide from

costs to vein 2, then narrowing, curved inwards and not reaching inner margin, the margin and cilia orange, the latter fuscous at middle of hind wing.

Hab. Sikhim; Khásis. Exp 30 millim

5128. Crocidophora distinctalis, Swinh A M N H (6) xiv, p 144.

J. Bright orange-yellow, palpi fulvous, white below, fore legs banded with fulvous. Fore wing with the costal area fulvous and fuscous, a dark discocellular spot, traces of an oblique postmedial line bent inwards at vein 3, both wings with a submarginal dark band of somewhat triangular shape.

Hab. Khásis. Exp 32 millim

5129 Crocidophora discolorata, Swinh A. M N H (6) xiv, p. 144

o. Bright straw-colour, palpi orange, white below, abdomen ringed with white. Fore wing with the basal half tinged with fulvous, the tovea large. Both wings with a postmedial line, traight from costa to vein 3, along which it is retracted, then almost obsolete, a broad marginal fulvous band terminating at vein 3 of hind wing

Hab. Khásis Exp 24 millim

5130 Crocidophora pallidulalis, Swinh. A. M N H (6) xiv, p 141.

J. Very pale ochreous, palpi and collar rather darker Fore wing with traces of waved antemedial line, of a speck in cell, and discocellular lunule, a rather more prominent obliquely curved minutely dentate postmedial line. Hind wing with traces of curved minutely dentate postmedial line.

Hab. Khásis Exp 30 millim

B Antennæ of male slightly knotted and contorted at one-fifth from base

5131 Crocidophora epicrocalis, Swinh Trans Ent Soc 1890, p 275.
Circobotys marginalis, Hmpsn Ill Het viii, p 133, pl 155, fig 1 (3)

of Orange Fore wing with the basal half of costal area suffused with fuscous; an erect antemedial dark line, a discocellular speck, a postmedial line excurved from vein 6 to 3, then recurved to origin of vein 2 and waved to inner margin; the outer area purplish fuscous. Hind wing with sinuous postmedial line not reaching costs or inner margin, the outer area purplish fuscous from apex to vein 2

Q. Fore wing broader and less produced at apex; the postmedial line straight from costa to vein 3, no dark marginal area but a fine dark marginal line, and the cilia dark from the apex of tore wing to vein 2 of hind wing, which has the postmedial line

straight and oblique

Hab. Nilgiris, Rangoon. Exp., & 22, 2 30 millim.

- C (Polychorista) Antennæ of male with a curved tooth of scales from basal joint, the basal part of the shaft slightly thickened and contorted, hind wing with the base of costa expanded into a large folded lobe
- 5132 Crocidophora calvatalis, Swinh Trans Ent Soc 1890, p 275
- J. Fuscous, the head and collar tinged with fulvous, palpi Fore wing with traces of antemedial dark line and of a postmedial line recurved from vein 5 to origin of vein 2 Hind wing with traces of oblique postmedial line

Hab. Rangoon Exp 28 millim

- D (Mimocomma) Antennæ of male with the base of shaft excised, a tuft of hair beyond the excision
- 5133 Crocidophora fulvimargo, Warr A M N H (6) xvi, p 473
- d Fuscous; the head, collar, and extremity of abdomen ochreous. Fore wing with the costa and apical area ochreous; an indistinct obliquely curved antemedial line, the postmedial line excurved between veins 6 and 3, then retracted to below end Hind wing with traces of oblique postmedial line; the marginal area slightly tinged with ochreous Underside ochreous Hab Sikhim, Khásis, Momeit, Burma. Exp. 24 millim.

Genus MARUCA

Maruca, Wik Cat xviii, p. 540 (1859) Crochiphora, Geyer, Hubn Samml. exot Schmett 1v, 4, p 12 (1832), Siriocauta, Led Wien ent Mon. 1863, p 424

Type, M testulalis, Geyer

Range. The tropical and subtropical zones.

Palpi porrect and triangularly scaled; the 3rd joint hidden by hair; maxillary palpi slightly dilated with scales, frons flat and oblique, antennæ slightly longer than the fore wing and annulated, legs long, tibiæ with the outer spurs about half the length of inner, abdomen long Fore wing with vein 3 from angle of cell; 4, 5 closely approximated for a short distance, 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with vein 3 from angle of cell, which is about half the length of wing, 4, 5 closely approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8

5134. Maruca testulalis, Geyer, Hubn Samml exot Schmett iv, 4, p 12, figs 629, 630, C & S no 4229 Hydrocampa aquatilis, Boisd, Guér-Mén, Icon Règne Anim pl 90, fig 9

Head, thorax, and abdomen fuscous brown, palpi white below.

Fore wing fuscous brown; the costal area tinged with fulyous, indistinct subbasal and antemedial lines across the cell and white



Fig 211 —Maruca testulalis, of

spots below the cell, a lunulate black-edged white spot in end of cell, a maculate blackedged semihyaline band beyond the cell from below the costa to vein 2. Hind wing semihyaline white, the basal costal area fuscous and a spot at upper angle of cell, two

indistinct sinuous postmedial lines, a marginal fulvous-brown and fuscous band from costa to vein 1 c, its inner edge very irregular Hab Neotropical and Ethiopian regions, Japan, throughout

the Oriental and Australian regions. Eap 26-30 millim

5135 Maruca amboinalis, Feld Res Nov pl 135, fig 24 Siriocauta similalis, Snell Midd-Sum, iv, Lep p 78

Differs from testulalis in being blacker. Fore wing with the basal two-thirds of costa narrowly fulvous, the spots in and below cell almost or quite obsolete, the postmedial band narrower and reduced to a spot below vein 3. Hind wing with a black speck at lower angle of cell, the marginal band terminating at vein 2.

Hab. Sikhim, Khásis, Nilgiris; Burma, Borneo, Amboina

Exp 30-32 millim.

Genus ADELOIDES.

Adeloides, Warr A M N H (6) 1x, p 299 (1892)

Type, A one eahs, Moore Range Sikhim, Bhután

Palpi porrect, lather long and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi dilated with scales, from rounded, antennæ minutely ciliated, at least one and a half times the length of fore wing, the basal joint dilated and bulbous in both sexes, the vertex of head clothed with rough hair, abdomen of male extending far beyond the anal angle of hind wing, the claspers large and covered by the large anal tuft, this with the outer spurs minute. Fore wing of male narrow and produced at apex, vein 3 from well before angle of cell, 4, 5 from angle Hind wing of male extremely ample, the cell short; vein 3 from the angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

- 5136. Adeloides cinerealis, Moore, P. Z S 1867, p 94, C & S. no 4217
- d. Head and thorax grey, palpi fulvous, white below, abdomen white Fore wing grey; the costa slightly tanged with fulvous,

faint traces of a discocellular lunule and curved postmedial line Hind wing pure white

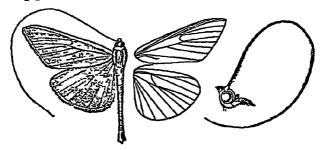


Fig 212 - Adeloides cinerealis, d

Q with the discocellular lunule and postmedial line of fore wing less obscure, hind wing with fuscous marginal band from apex to vein 2

Hab Sikhim Exp, & 50, 2 44 millim.

5137 Adeloides glaucoptera, n sp

d Uniform silvery fuscous grey, palpi fulvous, white below, tabiæ and tarsi white, abdomen dorsally tinged with fulvous

Hab Bhután (Dudgeon) Exp 46 millim Type in B M

Genus TETRIDIA.

Tetndia, War: A M N H (6) vi, p 477 (1890)

Type, T caletoralis, Wlk.

Range NE India, Ceylon, Burma; Malayan subregion to Celebes

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi dilated with scales, frons oblique; antennæ of male minutely cliated and considerably longer than fore wing, of female about the length of fore wing, fore and mid tibiæ of male fringed with hair on outer side, the thorax with tufts of hair below near mid legs, abdomen of male with the anal tuft long. Fore wing with the apex produced, the outer margin oblique, vein 3 from near angle of cell, 4, 5 from angle; 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the cell short, especially in male, vein 3 from the angle; 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8; vein 6 in male curved downwards.

- 5138. Tetridia caletoralis, Wlk Cat xvIII, p 651, C & S no 4233
 Boty's vinacealis, Moore, P Z S 1877, p 619, C & S no 4236
 Polythlipta albicaudalis, Snell Tijd v Ent xxIII, p 221, and xxVI, pl 8, figs 7, 7 a, b, c
- d. Red-brown with a vinous tinge, palpi white below, fore tibiæ and tarsi marked with white; mid tibiæ and tarsi white, the

tibial fringe of hair fulvous, abdomen with a white streak on anal tuft. Fore wing with waved antemedial black line, a waved disco-



Fig 213 — Tetridia caletoralis, of

cellular line, both wings with a minutely crenulate postmedial line, nearly straight from costs to vein 3, then retracted to below end of cell, and on hind wing terminating at anal angle, a marginal series of black specks

2 pale ochreous rufous. Fore wing with the costa tanged with fuscous, the margin and cilia of both wings fuscous, the legs not marked with white

Hab. Sikhim, Khásis, Sibságar, Ceylon, Burma, Andamans; Borneo; Celebes Exp 34 millim.

Genus PACHYNOA.

Pachynoa, Led Wien ent Mon 1863, p 391 Pitacanda, Moore, Lep Ceyl m, p. 334 (1886)

Type, P. thoosahs, Wlk.

Range. E. Africa, Oriental region.

Palpi porrect, dilated with scales above and enclosing a hollow in the male, the 3rd joint hidden by hair, maxillary palpi minute and filiform; from rounded, antennæ of male minutely serrate on upperside, pectinated on lower side, of female thickened, build stout, fore tibiæ and tarsi fringed with hair, mid tibiæ fringed with hair, hind tibiæ with a tuft of hair on outer side near base;



Fig 214 —Pachynoa thoosalis, & .

the spurs rather short. Fore wing produced at apex, the outer margin oblique, the inner margin lobed at middle; vein $1\,a$ forming a fork with $1\,b$; 3 from angle of cell, 4, 5 approximated for a short distance, 10 closely approximated to 8, 9. Hind wing with vein 3 from angle of cell, 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing strongly with 8.

SECT I. (Pachynoa). Hind table of male strongly dilated before middle and at extremity, the terminal spurs absent, antennæ with the branches short, hind wing with a vesicular lobe clothed with hair on inner margin; fore wing with a large shallow fovea on vein 1 above the lobe of inner margin.

5139. Pachynoa thoosalis, Wik Cat. xvm, p 787, Moore, P Z. S. 1877, pl 60, fig. 16, C & S no 4170

Pachynoa walkeri, Led. Wien. ent Mon. 1863, p. 391, pl 13, fig 2

Straw-coloured, palpi black at sides, head, thorax, and abdomen mostly suffused with fuscous, male with the anal tuft black. Fore wing with subbasal and antemedial fuscous patches which may be conjoined and occupy the whole basal area; a black spot in end of cell; the whole outer half of the wing occupied by a fuscous patch except some triangular patches on costa and outer margin. Hind wing with medial fuscous blotches from cell to inner margin, and an oblique series from costa beyond middle to anal angle; an obscure maculate submarginal line.

Hab Sikhim; Andamans; Celebes, Amboina; Ceram. Exp. 40-

44 millim

- SECT. II (Petacanda) Hind tibiæ of male not dilated, the terminal spurs present, fore wing with no fovea; hind wing with no vesicle on inner margin.
 - A. Antennæ of male with the branches on lower side short.
- 5140. Pachynoa sabelialis, Guen. Delt & Pyr p. 326, C & S. no 4168
 Botys elycesalis, Wlk Cat xix, p 995, C. & S no 4028

Orange-yellow, palpi white below, in male quadrately dilated with leaden-coloured scales; fore legs banded with white; a white shoulder-spot; the thorax fulvous; basal half of abdomen vinous red. Fore wing with the basal area and basal two-thirds of costal area suffused with purplish, a curved fuscous antemedial line; a large purplish patch at lower angle of cell with a line from it to inner margin, a postmedial line bent outwards and maculate from vein 5 to inner margin; a maculate submarginal line bent outwards at vein 5. Hind wing paler; a fuscous medial line from vein 2 to inner margin, a maculate sinuous postmedial line from vein 6 to anal angle, and a similar submarginal line from the costa to vein 2

Hab Kılıma'njaro, Sımla, Calcutta'; Burms, Andamans. Exp 32 mıllım

- *5141. Pachynoa? maccalis, Led Wien ent Mon 1863, p 466, pl 9, fig 14, C & S no. 4064
- d. Head, thorax, and abdomen white; collar with paired purple-brown stripes, abdomen with dorsal and lateral series of diamond-shaped marks. Wings with yellow in the interspaces of outer area. Fore wing with short subbasal purple-brown band, a rather irregular antemedial band, bands across middle of cell and discocellulars; two striges below end of cell; a series of streaks in interspaces beyond the cell of both wings, reduced to spots towards costa, longest between veins 5 and 2, and shorter again towards inner margin; chia chequered with brown.

Hab Khásis. Exp 46 millim.

5142. Pachynoa spilosomoides, Moore, Lep Ceyl in p 334, pl 183, fig 10, C & S no 4125

Head, thorax, and abdomen bright yellow and white, antennæ black, collar and tegulæ with blue-black spots, abdomen with lateral black patches on 1st segment, the next four segments with dorsal and paired lateral quadrate blue-black patches, a dorsal spot on 7th and terminal segments. Fore wing bright yellow, the veins white, a blue-black basal patch, four subbasal spots, an antemedial curved maculate band, a discocellular patch, a post-medial inwardly-oblique band of blue-black patches in the interspaces, with spots beyond them from costa to vein 3. Hind wing yellow and white; the male with a black patch on middle of inner margin.

The Nilgiri female has on the hind wing three submarginal

blue-black spots in the interspaces between veins 2 and 5

Hab Sikhim; Calcutta, Khandala; Bangalore, Nilgiris, Ceylon. Evp 46 millim.

5143. Pachynoa mineusalis, Wlk Cat xvii, p 481, C & S no 4828.

Q. White; the head, thorax, and abdomen slightly tinged with yellow; fore legs, thorax, and 2nd segment of abdomen spotted with black. Fore wing with some black spots on basal area, an antemedial black band, a large black discocellular spot, two small spots beyond lower angle of cell, the postmedial line highly excurved between veins 5 and 2, then retracted to below end of cell; a submarginal series of spots, the three between veins 5 and 2 displaced outwards, the spot below vein 2 displaced inwards. Hind wing with discocellular spot; a medial line from cell to inner margin; a sinuous postmedial line, a submarginal sinuous series of spots; a fine orange marginal line and line through the cilia.

Hab. Moulmein, Rangoon. Exp. 26 millim.

B Antennæ of male with the branches on lower side long.

5144 Pachynoa pectinicornalis, Guen Delt & Pyr p 326, C & S. no 4167

Differs from sabelials in being suffused with dull fulvous brown, the marginal area of fore wing yellower, hind wing pale, with the marginal area yellower

Hab Cutch; Bombay, Poona, Bengal Exp 34 millim

5145 Pachynoa hypsalis, n sp

d' Head, thorax, and abdomen orange-yellow, palpi and basal joint of antennæ black, thorax spotted with black, abdomen with dorsal and paired lateral series of black spots; wings pale yellow. Fore wing with the base orange, with a basal black spot and two curved series of black spots; a pale fuscous patch in end of cell,

a diffused oblique pale fuscous band bent inwards below the end of cell, traces of a pale fuscous diffused submarginal band. Hind wing with the hair on inner marginal lobe blackish, traces of pale fuscous maculate postmedial and submarginal bands.

Hab Sikhim (Moller) Exp. 44 millim Type in coll Elwes

5146 Pachynoa fuscilalis, Hmpsn Ill Het viii, p 133, pl 155, fig 2

d Head and thorax purplish fuscous, palpi black, white below, abdomen with the 1st segment rufous, the next three purplish, the terminal segments orange. Fore wing with the basal area purplish fuscous, with a curved dark antemedial line, extending along the costa and in the cell to the postmedial line, which is straight from the costa to vein 3, where it is retracted to below end of cell, the inner and outer areas orange, a black spot in cell and discocellular lunule. Hind wing paler, a dark mark on inner basal area; a sinuous postmedial line bent inwards at vein 2; the apex slightly suffused with fuscous

Hab Nilgiris Eap 24 millim.

Genus PARBATTIA.

Parbattia, Moore, Lep Atk p 225 (1888)

Type, P vialis, Moore.

Range Sikhim

Palpi poriect, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform, from rounded, antennæ of male minutely cliated, tabæ with the outer spurs about two-thirds length of inner. Fore wing with the apex produced, the outer margin oblique, vein 3 from near angle of cell, 4, 5 from angle, 7 straight and not approximated to 8, 9, male with a fovea below the cell at origin of vein 2. Hind wing with the costa lobed and fringed with hair near base, the cell extremely short and the discocellulars produced for a long way along median nervure so that veins 3, 4,5 appear to be stalked, 6, 7 from upper angle, 7 anastomosing strengly with 8

5147. Parbattia vialis, Moone, Lep Ath p 225, pl 7, fig 30, C & S no 4538

d. Head fuscous; palpi black, white below; thorax whitish;



Fig 215 —Parbattia malis, 3

white below; thorax whitish; abdomen black ringed with white. Fore wing blackish brown to the postmedial line, which is nearly straight from costa to vein 5, then incurved to middle of inner margin, the cell and area below it variegated with grey; black spots in cell and on discocellulars.

and two streaks on bases of veins 3, 4; a pale band beyond the

postmedial line, very broad towards inner margin, the marginal area black-brown, wide towards costa. Hind wing pale, with a series of dark specks on the veins from costa to vein 2 just beyond the middle; the marginal area suffused with fuscous, with a series of black specks on the margin

Hab. Sikhim Exp. 32 millim.

Genus DISCOTHYRIS

Discothyris, Warr A. M N H (6) xvi, p 473 (1895)

Type, D ferruginata, Moore

Range Sikhim

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform, frons rounded, antennæ of male ciliated, tibiæ with the outer spurs about half the length of inner. Fore wing with the costa arched towards apex, which is acute, the outer margin angled at vein 4; vein 3 from close to angle of cell; 4, 5 from angle, 7 curved and approximated for a short distance to 8, 9, to which 10 also is approximated. Hind wing with the outer margin produced to a point at vein 6 and excurved at middle; vein 3 from angle of cell; 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8, a large tuft of hair on median nervure at lower angle of cell

5148 Discothyris ferruginata, Moore, Lep Atk p 209, C & S

d. Pale ferruginous, palpi white at base below. Fore wing with industrict outwardly-oblique sinuous antemedial line; an



Fig 216 —Discothyris ferruginata, o

indistinct postmedial line highly curved from costs to vein 2 and angled outwards in interno-median interspace; the margin slightly suffused with fuscous. Hind wing pale, the area below the cell ferruginous; a postmedial dark line sinuous

from costs to vein 4, then somewhat bent outwards and waved to near anal angle; the apex slightly suffused with fuscous, the cilia blackish at base, pale at tips

Hab Sikhim Exp 22 millim

5149 Discothyris vestigialis, Snell Trans. Ent Soc 1890, p 628

d Differs from ferruginata in the patagia being white-tipped, the fore wing paler and semihyaline, the antemedial line obliquely curved; the postmedial line oblique and strongly marked from costa to vein 6, where it is angled, then waved, reduced to specks on the veins and inwardly oblique to inner margin just beyond

middle. Hind wing with the postmedial line maculate from vein 3 to inner margin, the spots on veins 2 and 16 black and prominent. Hab. Sikhim. Exp 22 millim

Genus NOMOPHILA.

Nomophila, Hubn Verz p 368 (? 1818)

Type, N. noctuella, Schiff

Range Universally distributed

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform, from rounded; antennæ of male with long cilia; the with the outer spurs about half the length of the inner, abdomen of male with lateral tufts on the terminal segments. Fore wing long and narrow; the apex rounded; vein 3 from well before angle of cell; 4, 5 from the angle; 10 approximated to 8, 9 Hind wing ample; veins 4, 5 closely approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8

5150. Nomophila noctuella, Schiff Wien Verz p 136, C. & S. no 4530

Pyralis hybridalis, Hubn Samml eur Schmett, Pyr figs 114, 184. Nephopteryx indistinctalis, Wik Cat xxvii, p 59

Grey-brown, palpi white below at base; abdomen with paired sublateral white stripes. Fore wing with a black streak below basal half of cell, large dark-edged brown orbicular stigmata in



Fig, 217 -Nomophila noctuella, d

and below middle of cell and a reniform discocellular stigma, a dentate postmedial line retracted at vein 3 to below the end of cell; a more or less prominent highly dentate submarginal line and series of dentate marginal marks; a dark line through

the cilia; the wing may be suffused with grey and all the markings dark and prominent, or may be nearly uniform brown or fuscous with the markings obscured. Hind wing paler, with the apical area slightly darker, the cilia whitish at tips

ł

Hab Universally distributed. Eap 24-34 millim.

Genus PACHYZANCLA

Pachyzancia, Meyr Trans Ent Soc. 1884, p 315 Acharana, Moore, Lep Ceyl III, p 285 (1885) Piloptila, Swinh. A M N H (6) xiv, p 142 (1894)

Type, P stultalis, Wlk

Range The tropical and warmer temperate zones.

Differs from Pyrausta in the hind wings having the cell somewhat shorter and veins 4, 5 approximated for a short distance, the outer spurs half the length of the inner.

2D

- SECT. I. Mid femora of male immensely dilated and clothed with large smooth scales on inner side
- A. Fore wing of male with the basal half of costa fringed below with long thick black hair, fore legs clothed with rough hair near the femore-tibial joint
- 5151. Pachyzancia licarsisalis, Wik Cat xviii, p. 686
 Botys pharaxalis, Wik Cat xviii, p. 725, C & S. no 4112 (part).
 Botys immundalis, Wik Cat xxxiv, p. 1448.

Fuscous, palp white below. Fore wing with outwardly-oblique



Fig 218—Pachyzancia licarsisalis, &

sinuous dark antemedial line; a speck in cell and discocellular lunule, a minutely dentate postmedial line bent outwards between veins 4 and 2, along which it is retracted to below end of cell Hind wing with discocellular speck, an indistinct

minutely dentate postmedial line bent outwards between veins 4 and 2, traces of a minutely dentate submarginal line, both wings with fine pale marginal line

Hab Japan, China, India, Ceylon, Malacca; Borneo; Java;

Australia; Fiji, Marshall Islands. Eup. 24-26 millim

- B. (Acharana) Fore wing with no fringe of hair on underside of costa, fore legs normal.
- 5152. Pachyzancia phosopteralis, Guen Delt & Pyr p 849
 Botys vestalis, Wik Cat xviii, p 579
 Botys otreusalis, Wik Cat xviii, p 637, Moore, Lep. Ceyl. iii,
 pl. 180, fig. 11, C & S no 4112 (part).
 Botys triarialis, Wik Cat xviii, p 639
 Botys abstrusalis, Wik. Cat. xviii, p 668

Differs from *licarsisalis* in being usually slightly darker, with a slight purplish suffusion, and the discocellular spot of fore wing more prominent

Hab Neotropical and Ethiopian regions; Aden; throughout India, Ceylon, and Burma; Andamans; Solomons Exp. 22-30 millim.

SECT. II. Mid femora of male not dilated nor clothed with large scales.

- A. (Piloptila). Male with the costa of fore wing fringed below with thick black hair at base.
- 5153. Pachyzancia nigricornalis, Swink A. M. N H. (6) xiv, p. 142 Greyish fuscous, palpi brown, white below. Fore wing with traces of an obliquely-waved antemedial dark line, a black

discocellular spot; a postmedial line minutely dentate from costa to vein 2 and bent outwards between veins 5 and 2, along which it is retracted, then developed into a patch above inner margin. Hind wing with discocellular black speck; a postmedial line highly bent out, minutely dentate and fine between veins 5 and 2; both wings with the cilia pale brown, with a series of fuscous specks.

Hab Khásis. Exp. 24 millim.

B. Male with no fringe of hair on costa below.

a. Male with no long tuft of hair and scales from the patagia extending beyond the metathorax.

5154. Pachyzancia rufescentalis, n sp.

3. Dark rufous; palpi white below at base. Fore wing with slight pale mark at base of inner margin; a very indistinct outwardly-oblique antemedial rufous line; an obscure discocellular lumile with pale outer edge; a minutely waved oblique postmedial rufous line excurved below costa; a marginal series of short striæ; cilia with dark line at base and through middle. Hind wing fuscous with marginal striæ from apex to vein 2; cilia pale with dark line at base. Underside with curved postmedial series of specks.

Hab. Tenasserim (Doherty). Exp. 24 millim. Type in coll.

Druce.

5155 Pachyzancla intensalis, Swinh A M N H (6) xiv, p 143 Ebulea ochripunctalis, Warr. A M N. H (6) xvin, p 111.

d Head and thorax dark chestnut-red; palpi whitish below; abdomen fuscous with pale segmental rings, the anal tuft rufous Fore wing dark chestnut, with a diffused dark patch on basal inner area, an indistinct minutely dentate oblique antemedial line, a large diffused fuscous patch beyond lower angle of cell, a minutely dentate postmedial line excurved from costa to vein 2, along which it is retracted to below angle of cell, a series of minute pale marginal specks, cilia black and rufous, the tips whitish. Hind wing fuscous, the outer area slightly suffused with rufous, traces of a curved minutely dentate postmedial line, cilia fuscous, pale at tips. Underside pale reddish, with postmedial curved series of black specks on each wing

Hab Sikhim, Khásis. Evp 28 millim.

5156. Pachyzancia ustulalis, n sp.

Differs from intensalis in being browner, the red suffusion confined to head, thorax, and base of fore wing. Fore wing with the discal fuscous patch smaller, the postmedial line somewhat reduced to specks and oblique from vein 3 to inner margin, not retracted. Hind wing with the postmedial line less excurved.

Hab. Ceylon (Green). Exp. 26 millim. Type in B. M.

5157. Pachyzancia callistalis, n sp

Q. Head rufous; palpi white below, thorax golden yellow and rufous; abdomen fuscous. Fore wing golden yellow suffused with bright rufous, leaving the cell, the area below it, and apical area yellow; the veins rufous; an oblique antemedial dark line from costa near base to middle of inner margin, where it is met by the postmedial line, which is very highly angled outwards to near the margin on vein 6, a marginal series of pale specks; the cilia dark brown. Hind wing dark brown, with traces of marginal series of pale specks. Underside suffused with fuscous; both wings with dark discocellular lunule and curved postmedial line. Tarsi banded black and white.

Hab. Margharita, Assam (Doherty). Exp. 28 millim Type in

coll. Elwes.

- 5158. Pachyzancia marginalis, Warr. A. M. N. H. (6) xvm, p. 115. Goniorhynchus obliquistriga, Warr. A. M. N. H. (6) xvm, p. 115.
- o'. Bright yellow; palpi and frons black-brown, the former white below; abdomen ringed with fuscous. Fore wing with the basal half of costa brown; traces of a subbasal line; a prominent erect antemedial line; a discocellular lumule conjoined to the costa, and by fasciæ on veins 3 and 5 to the postmedial line, which is minutely dentate from the costa to vein 2, then retracted to angle of cell; the fascia on vein 3 broad and joining at outer angle the marginal band which runs round the apex. Hind wing with discocellular spot; the postmedial line running out to acute angles on veins 5 and 3, where it touches the marginal brown line, then retracted to angle of cell, cilia of both wings brown, with an ochreous line at base.

Hab. Sikhim, Khásis. Exp 26 millim

5159. Pachyzancia subdentalis, Swinh. A. M. N. H. (6) xiv, p. 147

d. Fuscous. Fore wing with obscure antemedial dark line; both wings with black discocellular lunule, sinuous dark postmedial line outlined with whitish most strongly towards costa, excurved and minutely dentate between veins 6 and 2, a dark maculate marginal line and whitish specks at base of cilia

Hab Khásis. Exp. 24 millim.

5160 Pachyzancia cynaralis, Wik Cat xviii, p 672, C & S no 4051 Hapalia marginalis, Moore, Lep Ceyl iii, p 338, pl 182, fig 13, C & S no 4098

Differs from egrotales in the head and collar being fuscous. Fore wing with the basal half of costa more broadly fuscous, especially at base, a marginal fuscous band broad at apex and outer angle, indented with a sinus between veins 5 and 2. Hind wing with the apical area fuscous, a minutely dentate submarginal line both wings with marginal series of dark specks.

Hab. Sikhim, Ceylon. Exp 22 millim.

5161. Pachyzancia ægrotalis, Zell K Vet-Ak Handl 1852, p 38 Botys mutualis, Zell t c p. 40, Moore, Lep. Ceyl. m, pl. 178, fig 15; C & S no 4334 (part) Botys verminalis, Guen Delt & Pyr p 348. Botys admensalis, Wik Cat xviu, p 652, Hmpsn Ill Het ix, pl 173, fig 10, C & S no 4083
Botys basalis, Wik Cat xxxiv, p 1404, C & S no 4333. Botys apertalis, Wlk Cat xxxiv, p 1450 Acharana rudis, Warr A M N H (6) 1x, p 435 Acharana simplex, Warr A M N H (6) ix, p 436.

Acharana subalbescens, Swinh A M N H (6) xiv, p 147.

Pachyzancla honestalis, Warr A M N H (6) xvii, p 97.

Acharana subænescens, Warr A. M N. H (6) xviii, p 113.

d. Whitish with an ochreous tinge; palpi fuscous, white below; abdomen with a pair of black spots on 3rd segment. Fore wing with the costa fulvous and suffused with fuscous towards base; a black speck near base of inner margin; an outwardly-oblique sinuous antemedial line, a prominent black speck in cell, and both wings with a large discocellular spot and minutely dentate postmedial line bent outwards between veins 4 and 2, along which it is retracted to below end of cell; the margin dark, the marginal area of fore wing and apical area of hind wing sometimes broadly suffused with fuscous

2 more uniformly ochreous tinged with fulvous.

The form rudis from Japan, China, and India is dark fuscous in tone.

Hab W. & S. Africa; Nilgiris; Ceylon; Java. Exp. 22-30 millim.

b. (Pachyzancia). Patagua of male with a tuft of long hair and scales extending beyond the metathorax.

5162. Pachyzancia stultalis, Will Cat xviii, p 669, C. & S. no 4334 (part) Botys basistrigalis, Wik Cat. xxxiv, p 1443

Differs from agrotalis in being uniformly darker and more suffused with fuscous. Fore wing with the antemedial line more prominent, the postmedial line of both wings with more or less prominent pale outer edge.

Hab. China, throughout India, Ceylon, and Burma; Andamans, Sumatra, Java; Borneo; Celebes; Australia. Exp. 22-28 millim.

Genus LOXONEPTERA, nov.

Type, L carnealis, Hmpsn. Range. Sikhim: Assam.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform; from produced to a flattened plate with rounded edge, antennæ of male minutely ciliated, tibiæ with the outer spurs minute, mid tibie of male dilated with a fold containing a tuft of long hair, abdomen of male with very large paired lateral tufts from just beyond middle. Fore wing of male with fringe of long hair on base of inner margin, which is excised towards outer angle and bears a curved tuft of hair; vein 3 from

before angle of cell; 4, 5 from angle, 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing of male with fringe of hair on median nervure towards angle of cell; a small tuft below vein 2 and a fringe on vein 1 c, vein 3 from before angle of cell, 4, 5 somewhat approximated for a short distance, 6, 7 from upper angle.

5163. Loxoneptera carnealis, n. sp.

d. Pale flesh-colour, palpi fulvous, white at base below,



Fig 219—Loxoneptera carnealis, o

abdomen ochreous tanged with fuscous Fore wing with the veins rather darker; a black discocellular speck Hind wing fuscous, with large ochreous costal patch from before middle to near apex, joined by a curved patch below the cell from

near the base; the anal angle ochreous. Underside pale, fore wing with the cell and disk suffused with fuscous

Hab. Sikhim (Moller); Khásis Eup. 36 millim Type in

coll. Elwes.

Genus PROŒDEMA, nov.

Type, P. inscisale, Wlk.

Range N.E India; Ceylon, Malayan subregion to N. Australia-Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform; from with a rounded prominence; antennæ thickened and flattened; tibiæ with the outer spurs half the length of the inner; male with the claspers long and exserted. Fore wing rather narrow, the apex rounded, vein 3 from before angle of cell, 4,5 from angle; 7 curved and approximated to 8,9. Hind wing with veins 4, 5 approximated for a short distance, 6,7 stalked, 7 anastomosing with 8.

5164. Procedema inscisale, Wik Cat xxxiv, p. 1410, Moore, Leps Ceyl in, pl 181, fig 1, C. & S no. 4187

Palpi orange, head and thorax purplish brown, abdomen



Rig. 220.—Proadema inscisale, &

fuscous, the basal and terminal segments tinged with fulvous. Fore wing purplish fuscous; the costal area orange-yellow, expanding before middle into a triangular patch with its apex on vein 1, and again on apical area into a patch narrowing to outer

angle. Hind wing pale brownish fuscous; the chia yellow.

Hab. Sikhim, Ceylon, Borneo, New Guinea; Australia.

Exp. 36 millim.

Genus PHLYCTÆNODES.

Phlyctænodes, Guen, Delt & Pyr p 173 (1854). Loxostege, Hubn Verz p 352 (P 1818), non descr Spilodes, Guen Delt & Pyr p 379 Dosara, Wik Cat xix, p 828 (1859) Eurycreon, Led Wien ent Mon 1863, p 376

Type, P. pustulalis, Hubn, from Europe Range. The tropical and temperate zones.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform; from with a sharp conical prominence, antennæ of male almost simple, legs smoothly scaled. Fore wing with the costa arched towards apex, vein 3 from near angle of cell, 4, 5 from angle. Hind wing with vein 5 from close to angle of cell; 4, 5 from the angle and more or less approximated, 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I. Hind tibiæ of male with the outer spurs one-half to three-fourths length of the inner.

5165. Phlyctænodes nubilalis, Hmpsn. Ill Het. viii, p 132, pl 154, | fig 12

Fuscous brown, palpi white below; abdomen ringed with white. Fore wing with indistinct sinuous ante- and postmedial lines, the latter highly excurved from vein 5 to 2, along which it is sharply retracted to near median nervure, very indistinct dark ocelli in cell and on discocellulars. Hind wing with dark spot on discocellulars, an indistinct postmedial line highly excurved from vein 5 to 2, where it is sharply retracted, both wings with a marginal series of dark spots.

Hab. Nilgiri plateau. Exp. 22 millim.

5166. Phlyctænodes sticticalis, Linn Syst Nat i, 2, p 883, Dup. Lép Fr viu, pl 215, fig. 5, C & S no 4146

Fuscous brown with a rufous tinge; palpi white below. Fore wing with grey streaks in, beyond, and below cell; a quadrate whitish spot in end of cell between the oblique orbicular and remform stigmata, which are obscure, an irregular and minutely dentate postmedial dark line angled inwards below cell, a yellow marginal line expanding at vein 6. Hind wing more fuscous, with indistinct sinuous dark postmedial line with pale outer edge; cilia of both wings leaden grey. Underside pale ochreous, with the stigmata of fore wing prominently dark and postmedial and submarginal lines prominent on both wings.

Hab. N. America; Europe; Quetta. Exp. 24 millim.

5167. Phlyctænodes nudalis, Hubn Samml eur. Schmett, Pyrfig 90 Pyralis interpunctalis, Hubn Samml eur Schmett, Pyr fig. 128;

C. & S no 4175

Botys unipunctalis, Dup Lép Fr vii, p 166, pl 221, fig. 5. Botys bipunctalis, Dup Lép. Fr vii, p 167, pl 221, fig 6 Botys pauciferalis, Wile Cat xxxiv, p 1413, C & S no 4071.

d. Bright straw-colour Fore wing quite uniform or with dark spots at end of cell and below its middle, and a sinuous postmedial series, any of which may be absent. Hind wing paler.

2 usually darker, the hind wing being tinged with fuscous and

often with traces of a postmedial line.

The whole insect is sometimes suffused with fuscous.

Hab. S Europe, W. Africa; Syria; Aden; Punjab; Combatore; Ceylon. Exp. 20-24 millim.

5168. Phlyctmeedes massalis, Wik Cat xvin, p 792

Dosara ccelatalis, Wik Cat xxx, p 829, Hmpen Ill. Het. ix,
pl 172, fig 22, C. & S no. 4586

Ochreous; the head, thorax, and fore wing more or less completely suffused with ferruginous, palpi white below at base. Fore wing with the costa and a streak below median nervure ochreous, the latter ending in a dark spot, an oblique ochreous



Fig 221
Phlyctanodes massalis, 5

postmedial line with black on its inner edge from vein 5 to 2, sending teeth inwards at veins 5 and 2, and in the ochreous specimens with ferrugmous suffusion on its inner edge from the costa to vein 5; a marginal series of black lumiles; the cilia fuscous. Hind wing pale fuscous or pale ochreous,

with the marginal area slightly suffused with fuscous Hab. W. Africa, N.W. Himalayas; Punjab; Karáchi, Poona; Ceylon; Australia. Exp. 18 millim.

- 5169. Phlyctænodes palmalis, Swinh. P. Z S 1884, p 525, pl. 48, fig 11; C & S no 4156
- Q. Fulvous. Fore wing with a diffused fuscous band from base of costa, conjoined at inner margin to a postmedial band of fuscous suffusion on the inner edge of the sinuous white submarginal line; a series of dark marginal strige. Hind wing pale, with indistinct dark postmedial line becoming obsolete towards inner margin; some rufous suffusion and a series of dark striges on outer margin.

Hab. Aden; Karáchi. Exp. 18 millim.

- 5170. Phlyctænodes simplalis, Sunh P. Z S 1889, p 421.
- Q. White, head and thorax ferruginous, palpi white below abdomen banded with ferruginous. Fore wing with the costal area ferruginous; an industrict subbasal band; an erect antemedial line; a spot in cell and lunule at end of it, a postmedial obscurely dentate band very much incurved below vein 4; a dentate

submarginal band and marginal series of spots Hind wing with cell-speck; a postmedial band incurved below vein 4, a submarginal dentate band and marginal series of spots, both wings with the cilia ferruginous.

Hab. Sind Exp. 20 millim.

SFCT II Hind tibiæ of male with the outer medial and distal spurs minute.

5171. Phlyctænodes palealis, Schiff Wien Verz p 123.
Phalæna flaveolata, Rott Naturf xi, p 80
Pyralis selenalis, Hubn Samml eur Schmett, Pyr fig 177.
Botys anaxisalis, Wik Cat. xviii, p 658, C & S no 4043

Pale sulphur-yellow; palpi black; abdomen white at base. Fore wing with the costa black. Hind wing white, with an indistinct postmedial blackish band from costa to vein 2, prominent on underside, a more or less developed apical black patch. Underside of fore wing white, with the veins and costal area black, a postmedial black band and apical patch.

Hab Europe; Syria, Japan, China, N.W. Himalayas.

Exp 30-36 millim.

5172 Phlyctænodes verticalis, Linn Syst Nat 1, 2, p 882. Pyralis limbalis, Schrank, Fauna Boica, ii, 2, p 64 Botys cinctalis, Treitschke, Schmett Eur vii, p 97

Pale yellow, head, thorax, and abdomen variegated with fuscous; palpi white below. Fore wing with the veins dark; an oblique sinuous antemedial line, an annulus in cell and discocellular ovate mark, a minutely dentate postmedial line straight from costs to vein 2, along which it is retracted to below angle of cell; a minutely dentate somewhat diffused submarginal line, the costs and margin often blackish. Hind wing with dark postmedial line slightly retracted at vein 2; a more or less developed submarginal sinuous line, sometimes diffused over the whole apical area; a dark marginal line. Underside with the veins and all the markings prominently dark.

Hab. Europe, Japan; Afghanistán; N.W. Himalayas; Khásis. Exp 30 millim

5173. Phlyctænodes brevivittalis, n sp

& Paleyellowish brown; palpi fulvous, white below; abdomen with fuscous dorsal bands on 2nd and 3rd segments, the next four ringed with black. Fore wing with indistinct dark antemedial line, curved from costa to median nervure, then outwardly oblique and developed into a very prominent inwardly-oblique black band from middle of interno-median interspace to inner margin; both wings with oblique minutely dentate indistinct postmedial line anding at vein 2 of hind wing, the marginal area suffused with fuscous; the cilia bright yellow.

Hab. Nágas (Doherty). Exp. 30 millim. Type in coll. Elwes.

- 5174. Phlyctænodes crocalis, Hmpsn Ill. Het vin, p 181, pl 154, fig 7.
- 6. Bright orange-yellow; head and femora fulvous, the fore table banded fulvous and white, palpi white below. Fore wing with the basal half of costa fulvous, an erect slightly sinuous antemedial fulvous line; a speck in cell and striga at end of it, an obscure postmedial dentate line highly excurved from veins 5 to 2, then bent inwards. Hind wing with dentate postmedial line excurved from vein 6 to 2, where it is bent inwards.

Hab. Nilgiris, Ceylon. Exp 30 millim.

- 5175 Phlyctmnodes perbonalis, Swinh Trans Ent Soc 1890, p 272, pl 8, fig 17
- Q. Rufous brown; head and collar fuseous Fore wing with the costal area fuscous, with a series of dark specks on it, an indistinct antemedial sinuous line; a grey and fuscous spot in cell and lunule at end of it, an oblique postmedial line slightly excurved between veins 5 and 2, a waved submarginal line; a series of indistinct dark marks just inside the margin, one above the outer angle being largest. Hind wing with oblique nearly straight ante- and postmedial and curved submarginal lines almost meeting near anal angle, fuscous patches at apex and anal angle, and a series of obscure dark marks just inside the margin.

Hab Rangoon Exp 26 millim.

Genus DIASEMIA.

Diasemia, Guen. Delt & Pyr. p 233 (1854)

Type, D letter ata, Scop

Range Universally distributed.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales; frons rounded, antennæ annulated and ciliated, in male minutely serrate, tabiæ with the spurs long and even. Fore wing long and narrow, veins 3, 4, 5 from angle of cell, 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the outer margin excised below apex, the cell short, veins 3, 4, 5 from angle, 6, 7 from upper angle, 7 anastomosing strongly with 8.

5176. Diasemia litterata, Scop Ent Carn p 229
Phalæna argentalis, Fabr Ent Syst 111, 2, p 240
Isopteryx impulsalis, Will Cat xvii, p 404, C & S no. 4368

Brown and fulvous black, palps white below at base, abdomen ringed with white. Fore wing with white antemedial band from median nervure to inner margin; a spot in end of cell conjoined to a triangular patch with dark lines on it below the cell; a post-medial white line from costa to vein 2, more or less angled inwards at vein 5 and with a spot inside it above vein 5; a series of small dentate dark marks on the margin, the cilia intersected with

Hind wing with a white spot in cell and another beyond the discocellulars, with a band from it to inner margin, a postmedial line from costa to vein 2, angled inwards at vein 5; cilia white and fuscous, with a dark line through them.

Impulsalis is a small ochreous female with a black patch on inner margin of fore wing between the antemedial and medial

white markings

Hab. Europe; Japan, Sikhim; Ceylon. Exp. 14-20 millim.

5177. Diasemia ramburialis, Dup Lép. France, viii, p 343, pl. 233, fig 6, Moore, Lep Ceyl iii, pl 179, fig 5, C. & S. no 4369.

Isopteryx melaleucalis, Wlk Cat xvii, p 402

Lineodes leodocusalis, Wlk Cat xix, p 947 Diasemia reconditalis, Wik Cat xxxiv, p 1325 Diasemia leucophæalis, Wik Cat. xxxiv, p 1326

Black irrorated with ochreous spots, abdomen with the base



Diasemia ramburialis, of

Fore wing with small white spot in end of cell, and two spots below the angle, an oblique postmedial line excurved between veins 5 and 2. Hind wing with broad subbasal and medial white bands, a postmedial line oblique from costa to vein 5, then bent outwards to vein 2, where it

terminates, cilia of both wings chequered black and white Hab. Universally distributed. Exp 16-18 millim

5178. Diasemia accalis, Wik Cat xix, p 1015,
Diasemia grammalis, Meyr Trans Ent Soc 1894, p 9 (nec Doubl).

Reddish brown; abdomen fuscous with pale rings Fore wing with blackish antemedial mark on inner area, followed by a pale band, then a black band followed by a pale band with dark line on it and blackish patch beyond it above inner margin; obscure grey orbicular and reinform stigmata, a postmedial pale line straight from costs to vein 5, then slightly bent outwards Hind wing fuscous black, with ochreous spot in end of cell with band from it to costa; a pale line from lower angle of cell to near anal angle, a postmedial line angled inwards on vein 5 and terminating at vein 2.

Hab. Shanghai; Dharmsála; Burma. Exp. 18 millim

Genus LEPIDONEURA, nov.

Type, L longipalpis, Swinh.

Range, Khásis

Palpi porrect, rostriform, and about twice the length of head, the 3rd joint long and hidden by hair; maxillary palpi dilated with scales; from flat and oblique; antennæ nearly as long as fore wing and almost simple; legs long and slender, tibiæ slightly fringed with hair, the outer spurs about half the length of inner, thorax of male with a large downwardly directed tuft of flattened hair from near origin of fore wing below; abdomen long and slender. Fore wing with the costa highly arched towards apex, which is somewhat acute, vein 3 from angle of cell, 4, 5 somewhat approximated for a short distance; 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with the cell about half the length of wing, vein 3 from angle; 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8.

5179. Lepidoneura longipalpis, Swinh. A. M. N. H. (6) xiv, p. 208.

d Head olive-brown, the vertex white; from with lateral white lines, palpi white below; thorax and abdomen streaked



Fig 223—Lepidoneura longipalpis, 5 1.

white and olive-brown. Fore wing white and thinly scaled; the veins thickly scaled with ochreous and olive-brown; the costa ochreous, an oblique olive-brown streak across end of cell, short black streaks in interspaces of outer area, increasing in

length to a long streak in interno-median interspace. Hind wing semihyaline; the veins of outer area thickly scaled with ochreous; a dark marginal line except towards anal angle.

Hab Khásis. Exp. 16 milhm.

Genus ANTIGASTRA.

Antigastra, Led. Wien ent. Mon 1863, p 419.

Type, A catalaunalis, Dup.

Range. Europe, E. & W. Africa; India, Ceylon, and Burma.

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair, maxillary palpi dilated with scales; from flat and oblique; antenne nearly as long as the fore wing and minutely citated; legs long, fore femora and tibies of male fringed with long hair; the outer spurs half the length of inner. Fore wing with the costs arched towards apex, which is acute and produced, veins 8, 4, 5 from angle of cell, 7 well separated from 8, 9. Hind wing with the cell half the length of wing; vein 3 from angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

5180. Antigastra catalaunalis, Dup. Lép France, viu, p. 880, pl. 282, fig 8, C & S no 4181
Botys venosalis, Wik. Cat xxxiv, p 1401.

Ochreous, the head and thorax suffused with fuscous, from with

lateral white lines. Fore wing



Fig 224
Antigastra catalaunalis, 5. }

Fore wing with the veins orange-red; traces of a spot in cell and discocellular spot, of a curved antemedial line and postmedial line excurved from costs to vein 3, then bent inwards to below angle of cell; the marginal area orange-red; the cilia black at base, pure white at tips. Hind wing reddish towards outer margin

Hab Europe; Syna; Aden; E & W. Atrıca, throughout India, Ceylon, and Burms. Exp. 20 millim.

Genus AGASTYA.

Agastya, Moore, P Z S 1881, p 378

Type, A hyblæoides, Moore.

Range. Sikhim.

Palpi rostriform, projecting about the length of head and downcurved at extremity, maxillary palpi with a sharp tuft of hair projecting forward from extremity, from rounded, antennæ chated, thin with the outer spurs about two-thirds length of inner, hind thin fringed with spinous hair on outer side. Fore wing broad and quadrate; the costa very much lobed at base, veins 3, 4, 5 from angle of cell, 7 straight and well separated from 8, 9, to which 10 is also approximated. Hind wing broad; the cell short; vein 2 from near angle; 3, 4, 5 approximated for some distance, 6, 7 from upper angle, 7 anastomosing with 8.

5181. Agastya hyblæoides, *Moore*, *P. Z S* 1881, p 379, *C & S* no 4524

Agastya flavomaculata, *Moore*, *P. Z S* 1881, p 379, *C & S* no 4523

J. Head, thorax, and abdomen dark red-brown Fore wing with the margins broadly dark red-brown; the disk golden brown,



Fig 225 — Agastya hyblæoides, d

a dark discocellular patch conjoined to the costal dark area; a conical yellow spot on middle of inner margin usually with a small spot above it Hind wing golden brown; the apical area blackbrown; a yellow submarginal spot between yeins 3 and 5,

the ciha yellow from below apex to middle Underside yellow. fore wing with the costal area, a discocellular band, and the outer area down to vein 2 black-brown, hind wing with the apical area blacksh, emitting a postmedial line ending on vein $1\,b$ and a marginal lunulate band ending on vein 2.

Hab. Sikhim. Exp. 32 millim.

Genus PROTRIGONIA, nov.

Type, P. zizanialis, Swinh. Range. Bombay, Ceylon.

Palpi porrect, projecting about the length of head, clothed with hair and downcurved at extremity, 3rd joint hidden; maxillary palpi with a pointed tuft at extremity, from rounded, antennæ of male somewhat thickened and flattened, tibize with the spurs nearly equal. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 7 straight and well separated from 8, 9. Hind wing with the cell about half the length of wing, vein 3 from before angle, 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8.

5182 Protrigonia zizanialis, Swiph P Z S 1885, p. 865, pl. 57, fig 12, C & S no 4472.



Fig 226 Protrigema ereamalis, &

Head, thorax, and abdomen pale brown, palpi blackish, white below, abdomen with dark bands Fore wing grey thickly mottled with brown, a black streak at base of costa; an inwardly oblique black antemedial line, an elongate discocellular ring-spot, a dark submarginal line excurved from costa to ven 3; the margin fuscous, a fine marginal black

line. Hind wing pale, suffused with fuscous on outer area; a curved postmedial line.

Hab Bombay, Ceylon. Exp. 16 millim.

Génus NOORDA.

Noorda, Wlk. Cat xix, p 978 (1859)

Type, N blittalis, Wlk.

Range W. Africa, Aden; India; Ceylon, Burma; Andamans. Palpi porrect, the 3rd joint long and rostriform, maxillary palpi clothed with hair produced to a point in front, frons rounded, tibiæ with the outer spurs about half the length of the inner. Fore wing narrow, the apex rectangular, the outer margin erect, vein 3 from before angle of cell, 4, 5 from angle Hind wing with veins 4, 5 approximated for a short distance, 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I. Antennæ of male almost simple.

5183. Noorda blitealis, Wik. Cat. xix, p. 979, C & S. no. 4227. Scopula subjectalis, Wik. Cat xxxiv, p 1472.

Dark fuscous, abdomen with lateral metallic-blue and black patches on segments 3 to 8. Fore wing with white patch on base of inner area; a curved black antemedial line; two



Fig 227 -Noorda blitealis, of

leaden grey discocellular spots on a pale discal patch, a black postmedial line outwardly obhque from costa to vein 4, then bent inwards and dentate towards inner margin; a curved submarginal line with some blueblack scales on it, a black line at the base of cilia, which are

Hind wing hyaline, with broad black marginal band grey at tips narrowing to anal angle; cilia with the tips pure white Underside white, fore wing with broad marginal black band.

Hab Aden and throughout the plains of India and Ceylon.

Exp. 24 millim.

SECT. II. Antennæ of male with long cilia.

5184. Noorda fessalis, Swinh P Z. S 1886, p 459, pl 41, fig 13, C & S no 4183.

Autocharis amethystina, Swinh A M N H (6) xiv, p 149

3. Very pale lemon-colour, almost white, palpi and shoulders fulvous; fore legs fulvous, the tarsı white, mid tibiæ with fulvous stripe above, anal tuft fulvous Fore wing with the costa fulvous; two black specks in the cell below costa and one at each angle of cell, any of which may be absent, the outer area pink, pinkish brown, or blackish, bounded inwardly by a slightly sinuous black line, dentate on vein 3 Hind wing with marginal pink band from apex to vein 2, narrowing and with fuscous suffusion inside it towards spex; both wings with the cilia fuscous or pale fulvous, white towards anal angle of hind wing

2 often slightly ochreous in tone; fore wing with the specks m cell obsolete, the black line inside the marginal band straight.

Hab. W Africa; Aden, Karáchi, Mhow, Canara; Bhután; Khásis, Nágas; Margharita, Assam; Manipur, Shan States; Andamans Evp. 16-18 millim

Genus DAUSARA.

Dausara, Wlk Cat. xvu, p 507 (1859)

Type, D talliusalis, Wlk.

Range N.E India; Burma; Andamans, Borneo

Palpi porrect, rather long, triangularly scaled, the 3rd joint hidden by hair, maxillary palpi with a long sharp tuft from extremity, from flattened and oblique; antennæ of male much thickened and flattened; tibiæ with the outer spurs about twothirds length of inner Fore wing with the inner margin lobed at middle, veins 3, 4, 5 well separated at origin; 7 curved and closely approximated for one-third length to 8, 9, to which 10 also is approximated, male with the median nervure bent upwards, on underside a very large tuft of large scales below its basal half and a smaller tuft in middle of cell. Hind wing with the cell short; veins 3, 4, 5 well separated at origin, 6, 7 from upper angle, 7 anastomosing slightly with 8.

5185. Dausara talliusalis, *Wik Cat* xvii, p 507. Glyphodes marginalis, *Moore*, *P. Z S.* 1877, p 618, pl 60, fig. 15, *C. & S* no 4187

d. Deep purplish fuscous with copper reflections, head with some white on frons and vertex; the patagia and lateral stripes



Fig 228 — Dausara talhusalis, 5.

on collar white, abdomen with lateral white marks at base. Fore wing with pearly white wedge-shaped mark on base of inner area, a broad medial pearly hyaline band edged by dark lines, the band forking towards costa, which the inner arm does not reach.

Hind wing hyaline, the inner area tinged with fuscous, a fuscous fascia from lower angle of cell to near outer margin below vein 2, where it is joined by a sinuous dark postmedial line, the area beyond which is purplish fuscous

The form marginals, from the Andamans, has the antemedial band of fore wing narrow, slightly curved, and even throughout.

Hab. Nagas, Tenasserim, Andamans, Borneo. Exp. 28 millim.

Genus HEMISCOPIS.

Hemiscopis, Warr A M. N H (6) vi, p 475 (1890) Micromania, Swinh A M N H (6) xiv, p. 141 (1894).

Type, H suffusalis, Wlk.

Range India, Ceylon, and Burma, Sumatra, Borneo.

Palpi porrect, rather long and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi with a long pointed tuft in front, frons rounded; antennæ almost simple and minutely annulated, tibiæ with the outer spurs about half the length of the inner. Fore wing with the apex somewhat acute, the outer margin rounded; veins 3 and 5 from close to angle of cell, 7 straight and well separated from 8, 9. Hind wing with veins 4 and 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing shortly with 8.

5186. Hemiscopis suffusalis, Wlk. Cat xxxiv, p. 1471, Happen. Ill.

Het ix, pl 173, fig 18, C & S no. 4159

Botys snellemann, Snell. Midd-Sum iv, Lep. p 61.

Bright purple-fuscous; head rufous, palpi black, frons with

lateral white lines; tarsi white; abdomen fulvous towards ex-



Fig 229 Hemiscopis suffusalis, of ‡

tremity Fore wing with outwardly oblique antemedial rufous line, a black postmedial patch on costa, with a large dark rufous roughly-scaled patch below it beyond the cell, traversed by the sinuous dark postmedial line which is bent inwards to the costa Hind wing with oblique black line from median nervure,

joined by a streak in interno-median interspace; an oblique postmedial line bent outwards to outer margin above anal angle, both wings with black marginal line

Hab Nilgiris; Ceylon; Tenasserim, Sumatra; Borneo Exp.

22 millim.

5187. Hemiscopis expansa, Warr A. M. N H (6) 1x, p. 396

Differs from suffusalis in being much larger and paler; no rufous on head and abdomen. Fore wing with the postmedial line more excurved beyond the cell, the rufous suffusion confined to its inner side and extending to inner margin. Hind wing with rufous suffusion inside the medial part of postmedial line.

Hab Simla; Dharmsala. Exp, & 26, 2 32 millim.

5188. Hemiscopis stigmatilis, Swinh A M. N H (6) xiv, p. 141

Fuscous black with a slight purplish tinge. Fore wing with the basal and outer areas darkest, the medial area paler; curved subbasal and antemedial black lines; a postmedial line, sinuous from costa to vein 3, then retracted to upper angle of cell round the discocellular black lunule and sinuous to inner margin; a sinuous submarginal and a marginal series of pale specks. Hind wing with obscure antemedial black line, sinuous postmedial line; the outer area darker, with pale diffused submarginal line; a fine pale marginal line. Underside greyer; fore wing with annulus round the discocellular spot, both wings with sinuous postmedial line, with diffused black band beyond it

Hab. Khásis Exp, & 26, 9 30 millim.

Genus MECYNA

Mecyna, Guen. Delt & Pyr p 406 (1854)

Type, M. gilvata, Fabr.

Range Universally distributed

Palpi porrect, long and rostriform, the 3rd joint partially concealed by hair; maxillary palpi dilated with scales at extremity; vol. iv. 2 m

frons flat; antennæ minutely calated, mid tibiæ dilated with a groove containing a taft of hair, hind tibiæ with the outer spurs about half the length of the inner. Fore wing narrow, the apex arched, veins 3 and 5 from close to angle of cell; 10 closely approximated to 8, 9 Hind wing with the cell short, veins 4, 5 closely approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8

5189 Mecyna gilvata, Fabr Ent Syst III, 2, p 208
Pyralis polygonalis, Hubn Samml eur Schmett, Pyr figs 204, 205
Pyralis diversalis, Hubn Samml eur Schmett, Pyr figs 102.
Mecyna aversalis, Guen Delt & Pyr p. 409, pl 4, fig 12.
Mecyna teriadalis, Guen Delt & Pyr p 410
Mecyna deprivalis, Wlk Cat xix, p 806, Moore, Lep Ceyl III, pl 179, figs 1, 1 a (larva), C & S no 4141
Mecyna rusticalis, C & S no 4142 (nec Hubn)

Head, thorax, and fore wing pale pinkish, dark vinous, or dark



Fig 230 —Mecyna gilvata, 3

fuscous suffused with grey, and with grey discal patch, palpi white below, abdomen orange. Fore wing with the costa darker, an industrict obliquely curved antemedial line, a spot in cell and discocellular lunule, a minutely waved curved postmedial line,

often reduced to a series of specks, the marginal area rather darker. Hind wing orange, with marginal dark band from costa to vein 1, but often obsolescent below vein 3. Underside orange, the apical area of fore wing and costal and apical areas of hind wing suffused with pink

Larva rather stout, green above, olivaceous below, dorsal, subdorsal, lateral, and two sublateral series of black spots, the subdorsal dotted with white, the sublateral with oblique yellow streaks between them, head and a band on legs black Pupa red

Hab S and E Europe; Madeira; Syria; Abyssinia, Aden, Punjab, Karáchi; Nilgiris; Ceylon Exp 28-34 millim.

Genus BCOTARCHA.

Bostarcha, Meyr Trans Ent Soc. 1884, p 805.

Type, B tamahs, Snell, from N Australia.

Range. N E India, Burma; Andamans, N Australia

Palpi porrect, long, rostriform, and depressed at extremity; maxillary palpi large and dilated with scales; from with a conical prominence; antennæ thickened and flattened, tabiæ with the outer spurs half the length of the inner. Fore wing long and

narrow, vein 3 from before angle of cell; 4, 5 well separated at origin. Hind wing with veins 4, 5 somewhat approximated for a short distance; 6, 7 from upper angle, 7 anastomosing slightly with 8

5190 Bœotarcha martinalis, Wik Cat xvii, p. 791; C & S. no 4154
Botys crassicornis, Wik Cat xxxiv, p 1455.

Head, thorax, and fore wing chestnut, more or less suffused with purplish, palpi white below at base; fore legs banded rufous



Fig 231 —Baotarcha martinalis, &

and white; abdomen whitish suffused with fuscous Fore wing with bright yellow rufous-edged band, in the form crassicornis broad withits inner edge sinuous, its outer edge indented at veins 3 and 5 and narrowing slightly to inner margin, in martinalis

only represented by two conjoined spots above inner margin; an indistinct paler ovate marginal area with fuscous inner edge, a marginal series of dark specks. Hind wing whitish, with the inner and outer areas suffused with fuscous

Hab Moulmein, Rangoon Exp, & 22, 9 26 millim.

5191. Bœotarcha hyalınalıs, n sp

Head, thorax, and abdomen greyish white; wings semihyaline nacreous. Fore wing with slightly sinuous brown antemedial line, prominent discocellular lunule; a minutely waved postmedial line arising from a dark costal spot and slightly excurved from vem 6 to 2, a marginal fuscous band and the cilia fuscous at base from costa to vein 2, a marginal series of white specks. Hind wing with slight marginal line or series of specks.

Hab. Bhutan (Dudgeon); Andamans. Exp. 28 millim. Type

in B. M.

Genus CALAMOCHROUS.

Oalamochrous, Led Wien. ent Mon. 1863, p. 386. Notaspis, Warr A M N. H (6) 1x, p 297 (1892)

Type, C. chilonalis, Led, from Venezuela.

Range S. America, E Europe, N. Asia, N. E. India, Ternate. Palpi porrect, long and rostriform, the 3rd joint downcurved; from oblique, maxillary palpi dilated with scales; antenne of male minutely ciliated; tibiæ with the spurs fully developed. Fore wing with the apex somewhat produced, veins 3 and 5 from close to angle of cell; 6, 7 from upper angle, 7 anastomosing with 8

2 E 2

SECT. I. Maxillary palps strongly delated with scales.

5192. Calamochrous tranquillalis, Led Wien ent Mon. 1863, pp. 371, 466, pl 9, fig 16

Fulvous yellow; thorax and abdomen suffused with dark brown, the latter with lateral white basal patches, a dorsal white patch on



Fig 232
Calamochrous tranquillalis, 5. 1

2nd segment. Fore wing with fulvous suffusion on costal area, the medial area dark purplish brown, with ablack spot in cell and lunule at end of it, the outer edge of the dark area excurved between veins 6 and 2, with a series of dark spots beyond it in the interspaces, a mar-

ginal series of dark specks. Hind wing pale yellow, the underside white.

Hab Sikhim; Khásis; Ternate. Exp. 36-40 millim

5193. Calamochrous ferruginalis, n sp

Q. Head and thorax fulvous; abdomen ochreous tanged with fuscous. Fore wing yellowish, almost wholly suffused and irrorated with bright ferruginous; a sinuous antemedial dark-line angled outwards below median nervure; a dark orbicular spot in cell, a large irregular dark patch on discocellulars extending to the costs and produced to an angle below it; an obliquely curved minutely waved dark postmedial line; a dark marginal line, the chia pale fuscous, with a dark line through them. Hind wing whitish. Underside whitish; fore wing with the blackish orbicular and discocellular patches very prominent; fuscous suffusion below end of cell; hind wing with discocellular and four postmedial dark specks.

Hab. Sikhim (Moller) Exp. 36 millim. Type in coll Elwes.

5194. Calamochrous carnealis, Swinh A. M. N H (6) xvi, p 302

Straw-yellow; palpi, head, and thorax suffused with flesh-pink. Fore wing with the costa white; the costal area and veins suffused with flesh-pink, a dark speck in cell and discoccilular spot; the margin and base of cilia flesh-pink. Hind wing with slight dark marks on margin at middle. Underside of fore wing with the subcostal and median nervures and cell-spots suffused with fuscous.

Hab. Khásis. Exp. 26 millim.

5195. Calamochrous ruficostalis, n sp Botys quadralis, Snell. Trans. Ent. Soc 1890, p 572 (nec Wik.)

d. Head, collar, and patagra bright rufous; thorax and abdomen fuscous. Fore wing fuscous, the costal area bright rufous; a dark

postmedial striga from the costa; the basal inner area whitish; diffused dark spots in cell and on discocellulars. Hind wing pale fuscous, with white medial patch on costa, the underside pure white, with the apical area fuscous and traces of a dark postmedial line.

Hab Sikhim (Knyvett) Exp. 20 millim Type in B M.

SECT II Maxillary palpi slightly dilated with scales

5196 Calamochrous dichroma, Moore, Lep Atk. p 223, C & S. no 4133
Calamochrous brevipalpis, Snell Trans Ent. Soc. 1890, p 599

- d Head, thorax, and abdomen dull ochreous, palpi fulvous, white below. Fore wing ochieous, suffused and irrorated with ferruginous, the costal area tinged with brown, traces of dark specks in cell and on discocellulars, the cilia black at base, white at tips. Hind wing ochreous, the costal and anal areas tinged with fuscous. Underside of fore wing with the cell and subcostals suffused with fuscous.
- 2 with the palpi rather longer, the fore wing more ochreous, the spots in cell and on discocellulars more prominent; hind wing whitish

Hab Sikhim Exp. 36 millim.

Genus METASIA.

Metasia, Guen Delt & Pyr p 251 (1854)

Type, M suppandalis, Hubn, from Europe.

Range Mediterranean subregion, Turkestan, Punjab; Deccan; Australia

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair, maxillary palpi dilated with scales, proboscis small; frons with a large rounded prominence, antennæ nearly simple; tibiæ with the spurs equal. Fore wing rather long and narrow, vein 3 from well before angle of cell, 10 well separated from 8, 9 Hind wing with vein 3 from near angle of cell, 5 from above the angle; 6, 7 from upper angle, 7 anastomosing with 8

5197 Metasia sabalosalis, Warr A. M. N H (6) xviii, p 217.

d. Yellow-brown mixed with white scales; palpi fuscous Fore wing with fuscous streak below basal half of costs; an antemedial fuscous line, a discocellular speck; a dark postmedial line nearly straight from costs to vein 2, along which it is retracted to lower angle of cell Hind wing with postmedial line bent outwards between veins 5 and 2; both wings with dark marginal line and a line through the cilia

2 more ochreous

Hab. Punjab, Poona Exp., & 12, 9 18 millim.

5198. Metasia monialis, Ersch, Hor Soc Ent. Ross. viii, p 317, id. -Fedtschenko, Reise Turk p. 78, pl. 5, fig 83.

Grey-brown, abdomen sometimes with some black on dorsum.



Fig 283—Metasia montalis, d

Fore wing very closely mottled with fine specks, some white near base, two medial greyish-white lines; a series of pale-edged black spots from beyond upper angle of cell to inner margin, incurved at vein 4, a submarginal white line excurved from costs to vein 4 and broad-

est at costa; a white striga just inside the margin from costa and another below middle. Underside white, both wings with curved brown postmedial line.

Hab. Turkestan, Campbellpur, Punjab. Eup. 26 millim

Genus PIONEA.

Piones, Guen Delt & Pyr. p 367 (1854). Udes, Guen Delt. & Pyr p 398 Pseudebules, Butl Trans Ent Soc 1881, p. 587. Lepidoplaga, Warr A. M. N H. (6) xvi, p 475 (1895).

Type, P. forficalis, Lann.

Range. Universally distributed.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales at extremity, from rounded, antennæ of male minutely ciliated; tabiæ with the outer spurs short. Fore wing with the apex somewhat produced; vein 3 from well before angle of cell, 4, 5 from angle; 10 closely approximated to 8, 9. Hind wing with the cell short, vein 3 from angle of cell, 4, 5 closely approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8.

SECT. I. (Udea). Mid tibes dilated with a groove containing a tuft of hair.

A. Antennæ of male somewhat thickened and flattened, hind tibræ with the outer medial spur minute.

5199. Piones ferrugalis, Hubn Sammleur. Schmett., Pyr figs 54, 150,

C & S no 4149
Scopula martialis. Guen Delt & Pur p 398

Scopula martialis, Guen Delt & Pyr p 398
Scopula hypatialis, Wil. Cat xix, p 1014, C & S no 4151
Scopula testaces, Butl III Het in, p 77, pl 59, fig 15

Fulvous yellow, more or less suffused with fuscous; palpi white below at base, frons white at sides. Fore wing with waved fuscous antemedial line; an orbicular spot in cell and larger oval discocellular mark, each being usually filled in with fuscous; a curved postmedial minutely crenulate line with obscure dentate



Fig 234 -Pronea ferrugalis, J. 1

line beyond it, a prominent marginal series of black specks, the culia fuscous. Hind wing ochreous, more or less suffused with fuscous, a dark spot at lower angle of cell, a curved minutely crenulate postmedial line most distinct towards costa, the apical area suffused with

fuscous, a marginal series of black specks from apex to vein 2.

Hab. Europe; Madeira; W & S Africa; Syria, Afghanistan, Japan, Sikhim, Nilgiris; Ceylon; Shan States. Exp. 22 millim.

5200. Pionea renalis, Moore, Lep Atk p. 224, C & S. no 4158.

Differs from ferrugals in the head, thorax, and abdomen being rufous suffused with fuscous. Fore wing bright ferruginous, with the markings prominent, especially the orbicular and discocellular patches; a broad fuscous marginal band; both wings with prominent marginal series of black specks.

Hab. Sikhim Exp. 22 millim

5201. Pionea octonalis, Snell Trans Ent. Soc 1890, p 581

Differs from ferrugals in being dark red-brown suffused over grey. Fore wing with the black-edged orbicular and reniform spots filled in with bright rufous, the postmedial line retracted at vein 2 to lower angle of cell, sending a very long tooth outwards along rem 1, and ending on middle of inner margin. Hind wing with the ground-colour white, the apical area fuscous

Hab Sikhim, Nágas Exp 24 millim.

B. Antennæ of male not thickened, hind tibiæ with the outer medial spur half the length of the inner.

5202. Pionea mandronalis, Wik Cat xix, p 1014, Hmpsn Ill Het. ix, pl. 173, fig 19, C. & S no 4153

Dull reddish brown suffused with fuscous, palpi white below. Fore wing with the costa fuscous, a curved antemedial line angled above inner margin, an obscure speck in cell and discocellular limile; a postmedial minutely waved line excurved from costa to vein 3, then retracted, the cilia fuscous. Hind wing pale semi-hyaline yellowish brown; faint traces of a curved postmedial line; a marginal fuscous band from costa narrowing to vein 3.

Hab. Dharmsála; Ceylon. Exp 20 millim.

5203 Pionea verbascalis, Schiff Wien Verz. p 121. Pyralis arcualis, Hubn Samml eur Schmett, Pyr. fig 80 Botys plumbocilialis, Snell Trans Ent Soc 1890, p 576

Fulvous yellow, palpi bright fulvous, white below; abdomen with pale segmental rings. Fore wing with the costal area suffused

with fulvous, a curved dark antemedial line; a speck in cell and discocellular band with a patch of fuscous beyond it, the postmedial line oblique from costa to vem 5, then slightly waved and excurved to vem 2, along which it is retracted nearly to the cell, an obscure minutely waved submarginal line, a dark marginal line, the chia fuscous. Hind wing with slight dark patch beyond lower angle of cell, the postmedial line bent outwards between vems 5 and 2, along which it is retracted, then oblique to anal angle, an indistinct waved submarginal line, the marginal area suffused with rufous, a dark marginal line; the chia pale

The typical form, which occurs on the Nilgiris, has the wings much suffused with fuscous from base to the postmedial line and on marginal area, leaving a quadrate yellow spot in end of cell of fore wing, whilst plumbocilialis, from Dharmsála and Sikhim, is a

much less suffused form

Hab. Europe; Dharmsála, Sikhim, Nilgiris Exp. 20 millim.

5204 Pionea albicostalis, Swinh Trans Ent Soc 1890, p 271

Bright straw-yellow, palpi white below; white lines at side of frons and some white on vertex of head; abdomen ringed with white. Fore wing with the costa white; traces of a discocellular lunule and postmedial line excurved between veins 6 and 2, along which it is bent inwards.

Hab. Punjab, Nilgiris, Rangoon. Evp. 28 millim.

5205 Pionea aureolalis, Led Wien ent Mon 1868, p 473, C & S no 4047 Pyralis ochrealis, Moore, P Z S 1877, p 614, C & S no 4069

Paliga contractalis, Warr A. M N H (6) xviii, p 113

Orange-yellow, palpi fulvous, white below, fore tibize banded with white and the tarsi white, mid legs white, the tibize with a fulvous stripe. Fore wing with curved fulvous antemedial line, a slightly oblique medial line; a slightly sinuous and oblique post-medial line from costs to vein 2, a curved submarginal line sending a tooth inwards on vein 2. Hind wing with sinuous oblique medial and postmedial lines, the former from cell, the latter from vein 6 to near anal angle, a waved oblique submarginal line ending near anal angle.

Hab Dharmsála; Sikhim; Khásis, Ceylon, Andamans. Exp,

♂ 20-36, ♀ 22-34 millim.

5206 Pionea præpandalis, Snell Trans Ent Soc 1890, p 578

d. Orange-yellow, palpi fuscous, white below at the base; fore tibes with a white band, mid tibes with a white stripe. Fore wing with the veins deeper coloured, a minutely waved curved antemedial orange and fuscous line, a discocellular line; a minutely dentate postmedial line bent outwards between veins 5 and 2, then retracted to lower angle of cell; a more prominent curved dentate submarginal line. Hind wing with dentate postmedial line.

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retracted at vein 2 to lower angle of cell, a dentate submarginal line slightly bent inwards at vein 2

Hab Sikhim. Exp. 30 millim

- 5207 Pionea leucanalis, Swinh Trans Ent Soc 1890, p 276, pl 8, fig 15
- Q. Head and thorax clothed with pink and orange scales; palpi white below. Fore wing orange, the veins with broad diffused pink fasciæ covering the greater part of the wing, the costal area fulvous, the costa white towards base, an obscure dark dentate oblique postmedial line reaching the inner margin before the middle; ciha with two pink lines through them. Hind wing light yellow, with pink marginal line

Hab. Khásis; Rangoon Erp 24 millim

SECT. II (Pronea). Mid tibiæ of male not dilated.

A Hind tibiæ of male with the outer me 'val spur half the length of inner

5208 Pionea forficalis, Linn Syst Nat 1 2, p 882, Dup Lép Fr. viii, pl 219, fig 6, C & S. no 4172

Brownish ochreous, palpi white below; abdomen pale Fore wing slightly suffused with rufous and with the veins rufous, a brown antemedial line dentate on subcostal and median nervures, then inwardly oblique and slightly waved, two conjoined spots at angles of cell with dark outlines and grey centres, a postmedial line dentate on veins 8 and 7, then inwardly oblique and slightly sinuous, an oblique streak from the apex and minutely waved submarginal line; a waved marginal line and line through the cilia Hind wing pale, with curved minutely waved postmedial and marginal lines

Hab Europe; Japan, NW Himalayas, Sikhim Exp 30 millim.

5209. Pionea nobilis, Moore, Lep Ath p 224, pl 7, fig. 29, C & S

d Pale ochreous, head and thorax fuscous black and ochreous, palpi black, white below Fore wing with the basal area and basal half of costa suffused with fuscous, a black spot in cell and discocellular lunule with a small fuscous mark beyond it, a fuscous striga below origin of vein 2, a wedge-shaped black submarginal band enclosing an ochreous spot on costa, its apex on inner margin Hind wing with discocellular speck, a very indistinct postmedial minutely dentate line bent outwards between veius 5 and 2, some slight fuscous marks on apical part of margin.

Hab Sikhim Exp 28 millim

5210 Pionea fentoni, Butl Trans Ent Soc 1881, p 587 Botys effusalis, Snell Trans Ent Soc 1890, p 577 (nec Will.)

Ochreous, palpi fuscous, white below; fore legs banded with fuscous, thorax and abdomen marked with fuscous Fore wing

with the basal half suffused with fuscous, sometimes with a reddish tinge, a subbasal ochreous line from cell to inner margin, hyaline spots in middle and end of cell, a large ochreous patch beyond cell extending along costa towards base and bounded by the postmedial line, which is straight from costa to vein 2, then retracted to angle of cell and defined by ochreous bands made and beyond it, the area beyond it more or less fuscous, with ochreous patches on costa and on margin expanding towards outer angle, often becoming the prevailing colour, a marginal series of dark specks Hind wing ochreous, with discocellular speck, a postmedial line nearly straight from costa to vein 2, then retracted to below angle of cell and waved, an apical fuscous patch and slight mark at anal angle

Hub Japan, Simla, Sikhim; Nilgiris, Tenasserim. Exp.

30 millim

5211 Pionea ablactalis, Wik Cat xviii, p 680, Hmpsn Ill Het. ix, pl 172, fig 6, C & S no 4082. Botys murinalis, Pagenst Jahrb Nussausch Ver fur Nat. 1885, p 55

Greenish grey. Fore wing with slightly oblique antemedial dark line; a dark discocellular line, a postmedial line nearly straight from costa to vein 3, then retracted to vein 2 and sinuous to inner margin Hind wing with discocellular line, a postmedial line excurved between veins 6 and 3, both wings with marginal black line; the cilia pure white.

Hab Sikhim, Poona; Nilgiris, Ceylon, Burma, Borneo,

Celebes, Sumbawa Exp 26-30 millim.

5212. Pionea brevialis, Wik Cat xviii, p 759, Hmpsn Ill Het ix, pl 173, fig 15, C & S no 4171 Botys divisalis, Led Wien ent Mon 1863, p. 468, pl 10, fig 4, C & S no 4053 Udea eximialis, Wik Cat xxxiv, p 1471, C & S no 4148

Varies from bright orange-yellow to fulvous yellow; palpi white below at base Fore wing either uniform, or with a more or less prominent outwardly-oblique sinuous antemedial line and postmedial waved line highly angled at vein 5, sometimes with a large fuscous discal patch in the angle, cilia black at base, pure Hind wing uniform and slightly paler. white at tips

Hab Dharmsála , Nágas Nilgiris , Ceylon , Jones Island, Australia *Eup* 22 millim

N Australia

5213. Pionea castoralis, Wik Cat xviii, p 698 Samea purpurascens, Moore, P Z S 1877, p 615, C & S no 4248.

2. Pale fulvous suffused with fuscous, palpi blackish, white above and below, from whitish, abdomen ringed with white, the anal tuft white tipped with fulvous Fore wing with erect dark antemedial line, with white dark-edged spot before it in the cell and larger spot beyond it, a postmedial white speck on costs and another before apex with a dark-edged tridentate white spot below PIONEA. 427

it from which arises a minutely waved line sharply retracted along vein 2. Hind wing with antemedial dark line angled on median nervure; a postmedial line highly angled at vein 2, along which it is sharply retracted; both wings with the cilia black at base, pure white at tips

Hab Nilgiris, Andamans; Borneo Exp 20 millim.

- B Hind tibiæ of male with the outer medial spur minute.
 - a Fore wing of male with no fans of scales below.
- 5214 Pionea gracilis, Warr P. Z & 1888, p 334 (nec Samea gracilis, Butl), C & S no 4245
- d Head, thorax, and fore wing whitish, suffused with ochreous and brown, the last with highly waved antemedial line, a large elliptical stigma in cell and very large irregularly reniform discocellular stigma, each with dark edge and pale fuscous centre, some ferruginous scales below the costa and on the veins beyond the cell; a minutely dentate obliquely curved submarginal line, a series of dark specks on the margin. Abdomen and hind wing pure white, the latter with dark cell-spot and indistinct curved postmedial line on underside

Hab. Thandiáni, Punjab Exp. 22 millim.

5215 Pionea migrostigmalis, Warr A M N H (6) xv11 p 96

Reddish brown; palpi white below, abdomen ringed with white. Fore wing with indistinct obliquely sinuous antemedial line, prominent black discocellular spot, an indistinct minutely dentate postmedial line excurved between costa and vein 3; some black specks on costa towards apex and a marginal series. Hind wing dark fuscous, with indistinct cell-speck and postmedial line, a marginal series of black specks. Underside with the costa of fore wing and the hind wing whitish, the latter with prominent cell-spot and highly curved postmedial line.

Hab. Bhután, Khásis Exp. 18 millim.

- b (Lepidoplaga) Fore wing of male with the reinaculum consisting of a large fan of leaden-coloured scales, and another large fan beyond the cell on bases of veins 6 and 7, each showing as a small dark fovea on upperside.
- 5216. Pionea flavofimbriata, Moore, Lep Atk p 208, C & S no 4255. Crocidophora flavicinetalis, Snell Trans Ent Soc 1890, p 595 Lepidoplaga longicorpus, Wari A M N H (6) xviii, p 108 Lepidoplaga elongalis, Warr A M N H (6) xviii, p 108
- c. Head, thorax, and abdomen brown, palpi rufous, white below Fore wing fuscous; the costal and outer margins ochreous, diffused at apex, faint traces of an antemedial line, a discocellular spot, and postmedial line minutely waved and bent outwards between veins 5 and 2, along which it is slightly retracted; cilia ochreous.

Hind wing fuscous brown, with traces of postmedial line bent outwards between veins 5 and 2, then slightly retracted; the cilia ochreous from apex to vein 2.

Hab Sikhim, Khásis, Calcutta, Ceylon. Exp. 24 millim.

5217. Pionea fuscizonalis, n sp.

- d. Ochreous; head fulvous Fore wing with the costal area tinged with fulvous, an oblique dentate postmedial line terminating at vein 2 of hind wing, a diffused fuscous submarginal band diffused to the margin at apex of fore wing and terminating on the margin at vein 2 of hind wing, a marginal series of dark specks Hab Sikhim (Moller). Exp. 36 millim. Type in coll Elves
- c Fore wing of male with fan of leaden-coloured scales beyond upper angle of cell below, the fan on median nervure pale, and no foveas on upper side.

5218 Pronea phænicistis, n sp

o. Yellowish brown, palpi white below at base. Fore wing with slight rufous marks at base and at end of cell, an oblique sinuous antemedial rufous line, an indistinct sinuous rufous postmedial line nearly straight from costa to vein 2, then retracted to lower angle of cell, a very prominent oblique blackish postmedial line, with the area beyond it purplish, leaving a large ovate brown patch on the margin, a marginal series of black specks. Hind wing with oblique postmedial rufous line, met at vein 2 by a diffused line from lower angle of cell, a prominent black line from costa to margin at vein 2, the area beyond it purplish, with marginal series of black stries and black line at base of cilia. Underside whitish.

Hab. Sikhim, Bhután (Dudgeon), Khásis, Tenasserim (Doherty). Exp 24 millim. Type in coll. Druce.

- d Fore wing of male with the retinaculum consisting of a large fan of leaden-coloured scales, no fan beyond upper angle
- 5219. Pionea flavicilialis, Snell Trans Ent Soc 1890, p 596, pl 20, figs 5 & 5 a
- d. Glossy rufous; palpi below and pectus pure white, abdomen fuscous Fore wing with indistinct waved antemedial line, a dark speck in cell, the indistinct dark postmedial line nearly straight from costa to vein 3, then retracted almost to origin of vein 2, the margin and cilia golden yellow. Hind wing with traces of dark line from costa to vein 2, with a paler shade beyond it, the cilia yellow.

Hab Sikhim. Exp. 24 millim.

Genus PYRAUSTA.

Pyrausta, Schrank, Fauna Boica, 11, 2, p 163 (1802)
Syllythria, Hübn Verz p 349 (* 1818)
Hæmatia, Hubn Verz p 349
Nascia, Curt Brit Ent vi, p 599 (1840)
Herbula, Guen Delt & Pyr p 175 (1854)
Ebulea, Guen Delt & Pyr p 357
Gyptitia, Snell Tijd v Ent xxvi, p 138 (1883)
Eclipsoides, Meyr Trans Ent Soc 1884, p 343
Paliga, Moore, Lep Ceyl 111, p 350 (1885)
Protocolletis, Meyr Trans Ent Soc 1888, p 223
Opsibotys, Warr A M N H (6) vi, p 474 (1890)
Sciorista, Warr A M N H (6) vi, p 475
Miciactis, Warr A M N H (6) ix, p 294 (1892)
Glauconoe, Warr A M N H (6) ix, p 296
Aplographe, Warr A M N H (6) ix, p 301
Crypsiptya, Meyr Trans Ent Soc 1894, p 463

Type, P cingulata, Linn, from Europe Range Universally distributed.

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair, maxillary palpi filiform, frons rounded, antennæ not more than three-fourths length of fore wing and minutely chiated, tibiæ with the outer spurs short, the outer medial spur of hind tibiæ not more than two-thirds the length of the inner spur. Fore wing with veins 3 and 5 from close to angle of cell, 10 free or rarely anastomosing with 8, 9. Hind wing with veins 4, 5 not approximated towards origin, 6, 7 from upper angle, 7 anastomosing with 8

SECT I (Pyrausta) Hind tibus with the outer medial spur one-half to two-thirds the length of the inner spur

A Hind tibic fringed on outer side with spinous hair.

5220 Pyrausta silhetalis, Guen Delt & Pyr p 166, C & S no 4337

Botys pangialis, Feld Reis Nov pl 134, fig 25 Pyrausta cupicalis, Moore, A. M. N. H. (5) 1, p 235, id 2nd Yai kand Mission, Lep pl 1, fig 26, C & S no 4335

Black-brown, head and legs orange, abdomen ringed with orange and with some orange on sides. Fore wing with faint traces of diffused dark ante- and postmedial bands. Hind wing with broad medial orange band not reaching the costa and narrowing to inner margin. Underside of each wing with orange fascia on inner margin meeting a medial band.

Hab Yarkand, N.W. and E Himalayas, Khásis Exp. 18 millim

5221 Pyrausta aurantifascialis, n sp

Q Black-brown, underside of palpi, thorax, and abdomen and the legs golden yellow; abdomen with fine pale rings Wings black-brown, fore wing with orange postmedial band from costa to vein 4, rounded at lower end; hind wing with similar band from below costs to vein 2, tapering to its lower end. Underside with the bands continued indistinctly to inner margin of each wing, fore wing with the outer area suffused with yellow, hind wing with the apex suffused with yellow, a marginal series of orange spots.

Hab Bernardmyo, Burma (Doherty) Exp 20 millim Type

in coll Elwes

5222 Pyrausta sikhima, Moore, Lep Ath p 207, C & S no 4861. Porphyrits maculata, Bull Ill Het vii, p 98, pl 184, fig 16

Black-brown, abdomen ringed with orange. Fore wing with some orange hair on basal area, an orange antemedial band from cell to above inner margin, a postmedial orange band composed of a large spot on disk conjoined to a small spot on inner area and speck below costa. Hind wing with medial orange band not reaching the costa and narrowing from cell to inner margin. Underside of fore wing with the basal area orange, a postmedial orange band conjoined to a fascia on inner area, hind wing with subbasal and medial orange bands.

Hab. Dharmsala, Sikhim, Nagas, Andamans Exp 16 millim.

5223. Pyrausta ustalis, Hmpen Ill Het vm, p 188, pl 155, fig 7

Red-brown suffused with fuscous, head and collar blackish, palpi white below. Fore wing with the basal costal area blackish; an obscure antemedial dark line, annuli in cell and on discocellulars. Hind wing with discocellular band, both wings with minutely dentate postmedial line bent outwards between veins 5 and 2, then retracted to below angle of cell, a marginal series of black specks.

Hab Nilgiris Exp 26 millim

B Mid tibiæ smoothly scaled

a. Fore wing of male without foveas in and beyond end of cell.

a' Thorax of male without large fan of scales at origin of fore wing below.

5224. Pyrausta cespitalis, Schiff Wien Verz p 128, C. & S no. 4868

Pyralis zonana, J. C. Schaff. Icon. Ins. pl. 262, figs. 4, 5.

Tinea vestianella, Clerck, Icon. Ins. pl. 11, fig. 11

Pyralis sordidalis, Hubn. Samml. eur. Schmett., Pyr. pl. 7, fig. 40.

Pirausta intermedialis, Dup. Lép. Fr. viii, p. 350, pl. 234, figs. 1, 2.

Phalæna despicata, Scop. Ent. Carn. no. 579, p. 231

Herbula picarialis, Wik. Cat. XXXIV, p. 1287.

Botys tendinosalis, Brem. Lep. Ost-Sib. p. 99, pl. 8, fig. 10

Head and thorax rufous irrorated with fuscous, abdomen fuscous ringed with white. Fore wing rufous, irrorated with fuscous and slightly suffused with grey; an irregular grey antemedial line dentate on median nervure; the orbicular and remiform with dark outline and often with a pale patch between them, a postmedial series of dark specks on a pale band excurved from

rein 6 to 4 and followed by irregular patches of dark suffusion, a pale marginal band and series of black specks. Hind wing black, with orange medial patch on costa, orange postmedial and marginal bands varying in width, the former with the outer, the latter with both edges waved, cilia of both wings fuscous. Underside orange, with black spot in cell of fore wing and at end of cell of both wings, an irregularly curved postmedial line and diffused submarginal band, the marginal area tinged with rufous. The fore wing may be entirely suffused with grey, rufous, or fuscous

Hab Europe, Syria, Siberia, Afghanistan, Punjab, Dharmsála,

Bernardmyo, Burma Eap 18-22 millim

5225 Pyrausta canotinetalis, n sp

3. Head and thorax sparsely clothed with brown hair, abdomen with grey hair, the anal tuft white. Fore wing vellowish grey, with a brown costal fascia, a brown patch on base of inner margin, an antemedial ill-defined brown band conjoined below cell to an oblique sinuous postmedial band, an oblique brown submarginal band expanding into a patch on inner margin, cilia tipped with grey. Hind wing fuscous, with diffused grey postmedial band and marginal grey line, the cilia white. Underside of fore wing fuscous, the marginal area white; hind wing white

2 with the ground-colour of fore wing much yellower and

brighter

Hab. Dalhousie (Harford), Kulu (Graham Young) Exp, & 36, 2 28 millim Type in B M

5226. Pyrausta aerealis, Hubn Samml eur Schmett, Pyr fig. 44 Pyralis opacalis, Hubn Samml eur Schmett, Pyr fig 170 Scopulata suffusalis, Treitschke, Schmett Eur vii, p 68

Differs from canotinctalis in being more uniform brown Fore wing with slight fuscous irroration; a dark discocellular speck and the pale waved postmedial band present Hind wing brown, with traces of postmedial dark line and a pale patch beyond it at lower angle of cell

Hab. Europe, Kashmir. Exp. 32 millim

5227. Pyrausta phœnicealis, Hubn Zutr 1, p. 22, figs 115, 116
Rhodaris flegialis, Wik Cat xvii, p 316
Rhodaris panopealis, Wik. Cat xvii, p 318
Botys cœcilialis, Wik. Cat xviii, p 581
Rhodaria ocellusalis, Wik. Cat xix, p 928
Rhodaria noraxalis, Wik. Cat xix, p 926
Rhodaria catenalis, Wik. Cat xixiv, p 1282
Rhodaria juncturalis, Wik. Cat xxxiv, p 1283, C & S no 4354
Rhodaria concatenalis, Wik. Cat xxxiv, p 1284, C & S. no 4353
Myriostephes heliamma, Meyr. Trans. Ent. Soc. 1885, p 448.

Orange-yellow. Fore wing more or less suffused with dull crimson, an outwardly-oblique sinuous antemedial line; a sinuous postmedial line highly excurved between veins 6 and 2, with a broad band of crimson suffusion inside it joining the antemedial

line at inner margin, a diffused crimson submarginal band and marginal line. Hind wing with oblique line from costa beyond middle to outer margin above anal angle, the area inside it more or less suffused with fuscous; the apical area more or less suffused with dull crimson or fuscous, narrowing to vein 2.

Hab. N and S America; W. Indies, Africa, China; Sikhim,

Bombay Presidency, Nilgiris, Australia. Exp. 20 millim.

- 5228. Pyrausta rubritinctalis, Warr A M N H (6) xvi, p 471
 Syllythria metallica, Warr A M N H (6) xvii, p 107
- d Head, thorax, and abdomen orange suffused with crimson, palpi white at base. Fore wing orange thickly irrorated with purplish crimson, traces of a curved antemedial line, a discocellular spot, a highly waved submarginal line; a crimson marginal band. Hind wing pale yellow

Hab. Khásis Exp. 18 millim.

5229. Pyrausta sanguinalis, Linn Syst Nat 1, 2, p 882
Pyralis hæmatalis, Hubn Samml eur Schmett, Pyr. fig 178
Pyralis auroralis, Zell Isis, 1847, p 647
Pyralis virginalis, Dup Lép Fr viii, p 216, pl 224, fig. 3

Bright straw-yellow, patagia tinged with crimson Fore wing with a crimson fascia on costa from base to beyond middle, a medial crimson band wide from costa to median nervure, then narrow and usually leaving a yellow discocellular spot, a broad oblique submarginal crimson band Hind wing pale yellow, with diffused fuscous submarginal band

The above is the form hamatalis, of which a specimen was taken

at Simla by Major Harford

The forms sanguinalis, auroralis, and virginalis from Europe have the hind wing dark, the crimson bands broad, and the whole outer area usually crimson, in the last two forms the bands are especially wide, in virginalis the yellow on postmedial area is reduced to a line.

Hab Europe; Syria, Simla, Kulu Europe 20-22 millim

- 5230 Pyrausta cruoralis, Warr. A. M N H (6) xvi, p 471
- d Head, thorax, and abdomen orange suffused with purplish crimson, palpi fulvous, white below; wings purplish crimson. Fore wing with some fuscous suffusion in cell and on outer area, the outer half of costa orange; a postmedial orange band expanding beyond lower angle of cell and on inner side below the cell Hind wing with postmedial orange band broad from costa to lower angle of cell, mid tabiæ white on outer side.

Hab. Khasis. Exp. 18 millim.

5231. Pyrausta machoralis, Wik Cat. xix, p 1018, C. & S no 4152

Scopula damastesalis, Wik Cat xix, p 1018, Hmpsn Ill Het. 1x, pl 178, figs 1, 8, Cotes, Indian Museum Notes, in, p. 94 (larva), C & S no. 4147

Botys egenalis, Led Wien ent Mon vii, pp 372, 468, pl 10, fig 7. Botys suavalis, Wik Cat. xxxiv, p 1448
Asopia rufipicta, Butl P Z S 1880, p 682
Paliga fuscicostalis, Swinh A M N H (6) xiv, p 146
Ebulea fimbriata, Moore, Lep Ceyl iii, p 346, C & S no 4135
Paliga rubicundalis, Warr A. M. N H (6) xvii, p 96

Bright yellow; palpi white below, from white at sides Fore wing with fulvous-yellow subcostal fascia, an antemedial line oblique from costa to vein 1, where it is dentate inwards; a speck in cell and discocellular lunule, a postmedial crenulate line highly excurved between veins 6 and 2, along which it is retracted, and dentate on vein 1, a more or less prominent crenulate submarginal line. Hind wing with crenulate postmedial line bent outwards between veins 5 and 3, along which it is retracted, both wings with marginal dark line and two lines through the cilia.

The form suavalis = fuscicostalis has the marginal area of fore wing and of hind wing to vein 2 suffused with fuscous; rubicun-

dahs from the Khásis has all the markings pink.

Larva pale sap-green, with paired dorsal series of purplish spots; head yellow, a few erect hairs on each segment. Destructive to teak trees.

Hab. Formosa; Khásis; Nilgiris, Ceylon, Burma; Java; Australia Exp, & 22, 2 24 millim.

5232 Pyrausta celatalis, Wik. Cat xviii, p 657, C & S no 4132 Botys subcrocealis, Snell. Tyd v Ent xxiii. p 208

Bright straw-yellow, palpi orange, white below. Fore wing with a slight fulvous tinge on costal area, an antemedial fulvous line, oblique from costa to vein 1, then erect; a discocellular line, both wings with a postmedial line excurved from costa to vein 3, then retracted Underside with marginal fuscous band, broadest at apex of each wing.

Hab Formosa, Ceylon; Shan States; Pulo Laut, Borneo,

Celebes. Exp, 322, 226 millim.

5233. Pyrausta ferrifusalis, *Hmpsn Ill. Het.* ix. p. 164, pl. 172, fig. 13.

Differs from celatalis in being fulvous red; both wings with indistinct minutely waved submarginal line.

Hab. Ceylon, E Pegu, Tenasserim Exp 26 millim.

5234. Pyrausta extinctalis, Christ Bull Mosc lvi. (1) p 20

Differs from ferrifusalis in the postmedial line being curved at vein 3 of each wing instead of sharply angled, but hardly traceable on hind wing; neither wing with the submarginal line or darker marginal area, cilia grey at tips.

Hab. Amur, Shan States. Exp. 24 millim.

5235. Pyrausta hyalodiscalis, Warr A M N H (6) xvi, p 471

Q Head orange fulvous, palpi white below, thorax and abdomen dark leaden fuscous, the anal tuft fulvous, wings dark leaden uscous; the costal area of fore wing and marginal area and chia of both wings orange. Fore wing with oblique sinuous antemedial black line, triangular hyaline white spot in end of cell, a medial black line excurved beyond cell. Hind wing with indistinct sinuous medial line.

Hab Khásis Exp. 22 millim.

5236. Pyrausta profusalis, Warr A. M N H (6) xvn, p. 95

o. Rufous, wings thickly irrorated with fuscous scales. Fore wing with indistinct curved antemedial ferruginous line; a speck in cell. Both wings with discocellular lunule, a postmedial line sinuous from costa to vein 2, then retracted to lower angle of cell and angled above vein 1; a marginal series of specks. Underside pale.

Hab Khásis, Ceylon; Tenasserim Exp. 18 millim.

5237 Pyrausta nigritalis, n sp.

d Glossy black-brown; palpi orange-yellow; legs ochreous. Both wings with faint traces of dark discocellular patch and of obliquely curved postmedial line.

Hab. Bernardmyo, Burma (Doherty). Exp. 18 millim. Type

m coll Elwes.

- 5238. Pyrausta coorumba, *Hmpsn Ill Het.* viii, p 182, pl 154, fig 18 Ehulea anomalalis, *Warr. A. M. N. H.* (6) xviii, p 110
- Q. Dark reddish brown, palpi white below, abdomen slightly ringed with white. Fore wing with indistinct dark antemedial line; a dark discocellular spot; a minutely crenulate postmedial line highly excurved between veins 6 and 2. Hind wing with indistinct minutely crenulate postmedial line. Both wings with marginal series of whitish specks. Underside of both wings with evenly curved postmedial series of black specks.

Larva greenish white, naked, feeds on a species of Nettie,

rolling the leaf, pupa black

Hab Khásis, Margharita, Assam; Nilgiris. Exp. 26 millim.

5239. Pyrausta tinctalis, Hmpen Ill Het viii, p 132, pl 154, fig. 6.

Brown suffused with purple, palpi white below, abdomen ringed with white. Fore wing with ancemedial black line bent outwards below costs, traces of a large dark discocciliular spot, a postmedial sinuous line highly excurved between veins 6 and 2, along which it is retracted, then sinuous to inner margin, with some white on its outer edge. Hind wing with black spots at upper and lower angles of cell, a postmedial line highly excurved from vein 6 to 3, then inwardly oblique, the outer area darker. Both wings with marginal series of black specks.

Hab. Nilgin plateau. Exp. 26 millim.

- 5240. Pyrausta purpurascens, Hmpsn Ill Het 1x, p 162, pl 172, fig 14.
- O Differs from tinctalis in the fore wing being darker and much more suffused with purple, an ochreous patch on the inner edge of the postmedial line on inner area, some dentate ochreous marks beyond the postmedial line and patch on inner area. Hind wing ochreous to the postmedial line, which is indistinct and has some dentate marks on its outer edge, no spot at lower angle of cell. Both wings with marginal series of ochreous spots.

Hab Ceylon Exp 30 millim

5241 Pyrausta benenotata, Swinh. A M N H (6) xiv, p 142

Fuscous suffused with purple, palpi and thorax white below, legs white ringed with black, abdomen of male with a white dorsal spot at extremity. Fore wing with waved black antemedial line angled below the cell, a black spot in cell and limite on discocellulars, a prominent postmedial black line minutely dentate from costa to vein 2, along which it is sharply retracted nearly to the cell, then dentate and thicker to inner margin. Hind wing with black cell-spot; a postmedial line excurved from vein 5 to 2, along which it is sharply retracted, then straight to anal angle. Both wings with prominent white maculate line at base of cilia.

Hab Sikhim, Khásis Exp 28 millim

5242 Pyrausta nigrescens, Moore, Lep Ath p 221, C & S no 4099

Q Fuscous with a slight purplish tinge; palpi white below. Fore wing with the costa orange-yellow from before middle to apex; an indistinct outwardly oblique curved antemedial line, a discocellular lunule; an indistinct dark postmedial line, bent outwards between veins 6 and 3, then inwards to below end of cell; ciha golden yellow Hind wing with faint traces of postmedial line, the ciha golden yellow from costa to vein 2

Hab Sikhim Exp 30 millim.

- 5243 Pyrausta nubilalis, Hubn Samml eur Schmett, Pyr fig 94, C & S no 4068
 Pyralis silarealis, Hubn Samml eur Schmett, Pyr fig 116
 Pyralis glabralis, Haw Lep Brit p 380
 Botys zealis, Guen Delt & Pyr p 332, C & S no 4106
 Hapalia kasmirica, Moore, Lep Ath p 222, pl 7, fig 28, C & S no 4097
 Hapalia lupulina, Butl Ill Het vii, p 19 (nec Clerck)
- d. Head, thorax, and abdomen brown; palpi white below; abdomen slightly ringed with white. Fore wing ochreous, almost entirely suffused with fuscous and dark rufous, a highly sinuous oblique antemedial line with ochreous on its inner edge; a dark spot in cell and lunule on discocellulars, usually with an ochreous patch between them; a dentate postmedial line with dentate ochreous band beyond it; a series of ochreous streaks on the veins

of outer area. Hind wing fuscous, with an obscure minutely dentate postmedial line with broad ochreous band beyond it

Q. Ochreous Fore wing with hardly a trace of fuscous suffusion, the sinuous antemedial and dentate postmedial and submarginal lines obscure or prominent. Hind wing with fuscous suffusion on basal area and slight suffusion beyond the postmedial band

Hab. Europe; N.W. Himalayas, Sikhim; Khásis, Manipur. Exp., & 30, 2 34 millim

- 5244. Pyrausta damoalis, Wlk Cat xviii, p 656, C & S no 4052 Hapalia dorsivittata, Moore, Lep. Atk p 223, pl 7, fig 18, C & S no 4089
- Ochreous slightly suffused with fuscous, palpi white below Fore wing with slight fuscous streaks on costa and subcostal nervure, an oblique dark sinuous antemedial line, a dark spot in cell and lunule on discocellulars, a minutely dentate postmedial line excurved from vein 6 to 4; an indistinct highly dentate submarginal line. Hind wing paler, with indistinct dark postmedial line not reaching costs or inner margin, traces of dark submarginal dentate marks. Both wings with fine dark marginal line.

There may be dark suffusion on marginal area of both wings and

nside the postmedial line of hind wing

2. Ochreous, without trace of fulyous suffusion.

Hab Japan , China ; Dharmsála ; Sikhim , Rangoon. Exp. 24-26 millim

5245 Pyrausta occultilinea, Wik Cat xxvii, p. 168

Ochreous; palpi fulvous, white below Fore wing with the costal area fuscous, the veins fuscous, dentate ante- and post-medial fuscous lines nearly meeting on inner margin, the former outwardly, the latter inwardly dentate, a discocellular lunule, a marginal series of specks Hind wing whitish.

Hab. Sikhim, Borneo. Exp. 38 millim.

5246. Pyrausta diffusalis, Guen Delt & Pyr p 340
Botys carnealis, Dup Lép Fr viii, p 322, pl 232, fig 4 (nec
Treitschke), C & S no 4050
Botys tenuialis, Mann Wien. ent. Mon 1862, p 387, pl 3, fig 5

Pale fulvous, more or less suffused with fuscous; palpi white below; a white line along palpi, side of frons, and base of shaft of antennæ. Fore wing with slightly curved antemedial fuscous line with pale inner edge, an indistinct speck in cell and lumile at end of it, a sinuous dark postmedial line with pale outer edge, very much excurved from vein 6 to 2, where it is sharply retracted to the median nervure. Hind wing with dark medial line with pale outer edge. Both wings with double fine marginal line. Hab. S. Europe; Syria, Punjab. Exp. 20-26 millim.

- 5247 Pyrausta vitellinalis, Koll Hugel's Kaschmu, iv, p 492, C & S no 4081 Botys extinctalis, Led Wien ent. Mon 1863, p 467, pl 9, fig 18.
- Q Fuscous with a fulvous tinge Fore wing with indistinct oblique antemedial line; a black spot in cell and lunule at end of it, a postmedial line excurved from costa to vein 2, along which it is retracted almost to the cell, then again excurved, traces of a curved submarginal line Hind wing with indistinct postmedial line nearly straight from costa to vein 2, where it is sharply retracted

Hab Kashmir, Sikhim, Rangoon. Exp 30 millim

- 5248 Pyrausta erropisalis, Wil. Cat xix, p 1006 Glauconoe atrigenalis, Warr A M N H. (6) xvii, p 95
- ¿ Fuscous grey, palpi black above, white below. Fore wing with the base of costa fuscous, an obliquely sinuous antemedial fuscous line, a black speck in cell. Both wings with a black discocellular lunule and postmedial minutely dentate fuscous line bent outwards between veins 5 and 2, then retracted to below angle of cell

Hab Khásis, Borneo Exp 34 millim.

- 5249 Pyrausta robusta, Moore, Lep Atk p 222, pl. 7, fig. 27; C. & S. no 4102
- Q. Head and thorax dark brown, with a few ochreous scales, abdomen brown ringed with ochreous, the base ochreous. Fore wing ochreous, the base brown, running out to an angle on inner margin, an antemedial brown line sending a spur outwards below cell, a brown spot in cell and quadrate discocellular spot with slight brown marks beyond it, a highly crenulate postmedial line retracted at vein 2 to below angle of cell, the area beyond it dark brown, with diffused ochreous patches at costa and beyond the retracted portion. Hind wing ochreous, with discocellular dark band, the postmedial band broad from costa to vein 5, then bent outwards and very highly crenulate to vein 2, with some dark streaks in the sinus, then retracted to near lower angle of cell and broad again, a diffused marginal dark band, broadest at apex, narrowing between veins 5 and 2 and again at anal angle.

Hab Sikhim. Exp 38 millim

- 5250. Pyrausta griseifusa, Swinh. Trans Ent Soc. 1891, p 153
- 2. Straw-colour suffused with fuscous; palpi fulvous, white below Fore wing with the costa not suffused, an indistinct oblique dark antemedial line angled on median nervure and joined at inner margin by a dentate postmedial line, which is excurved from vein 6 to 3, then oblique Hind wing paler, with traces of a minutely dentate curved postmedial line.

Hab. N. Canara, Nilgiris Exp. 34 millim.

5251. Pyrausta indistans, Mone, Lep Atk p 223, C & S no 4094.

Straw-colour suffused with brown; palpi fulvous, white below Fore wing with indistinct antemedial line slightly dentate on vein 1, a dark spot in cell and discocellular line, with quadrate ochreous patch between them, a minutely dentate postmedial line highly excurved from vein 6 to 2, where it is much bent inwards, traces of a waved submarginal line. Hind wing with dark cell-spot, a minutely dentate postmedial line incurved at vein 2 and on an ochreous band which extends from vein 5 to anal angle, a dentate submarginal line.

Hab. Dharmsála, Sikhim. Exp 32 millim

5252. Pyrausta signatalis, Wik Cat xxxiv, p 1444, C & S no 4108.

Bright straw-yellow, head and collar fulvous, palpi white below. Fore wing with a fuscous streak below basal two-thirds of costa; a subbasal line from below median nervure to inner margin, a sinuous antemedial line, a dark-edged white spot in cell and larger spot on discocellulars. Hind wing with a small dark-edged white discocellular spot. Both wings with a sinuous postmedial line bent outwards between veins 5 and 3, then recurved almost to origin of vein 2, a marginal fuscous grey-suffused band with waved inner edge bent outwards between veins 5 and 3 of each wing.

The Ceylon form is much more fulvous yellow

Hab N.W. Himalayas, Nilgiris; Ceylon, Java. Exp., 5 24,

2 28 millim

5253. Pyrausta punctimarginalis, n sp

J. Pale yellow, palpi white below at base. Fore wing with the base of costs slightly tinged with fulvous, an obliquely curved antemedial line, both wings with dark discocellular lumile, the postmedial line bent outwards and minutely dentate between veins 5 and 2, then retracted to below angle of cell, a marginal series of short strice and a fine line through the cilia

Hab Sikhim (Möller); Celebes Exp 26 millim Type in

coll. Elwes

5254. Pyrausta incoloralis, Guen Delt. & Pyr p 332, C & S no 4059

Botys melonalis, Wik Cat xviii, p 702, C & S no 4144

Spilodes intetasalis, Wik Cat xviii, p 773

Botys albidalis, Wik Cat xxxiv, p 1411, C & S no 4042

Botys ruficostalis, Led Verh zool-bot Ges Wien, 1850, p 217, pl 3, fig 4

Yellowish white, head and collar bright fulvous, palpi white below. Fore wing with the basal half of costs bright fulvous, an indistinct outwardly oblique antemedial fuscous line, a fulvous speck in cell and lunule on discocellulars, a somewhat maculate postmedial fuscous line highly excurved from vein 6 to 2, then bent inwards, a marginal fuscous band widest at apex. Hind wing with obscure fuscous spot at lower angle of cell, a postmedial dentate line highly excurved from vein 5 to 2, a more or less prominent marginal band, obsolete in the Syrian and nearly so in the Aden specimens

Hab Syria, Aden, Congo, S Africa, throughout India,

Java, Celebes; Australia. Exp. 30 millim.

- 5255 Pyrausta ciniferalis, Wlk Cat xxxiv, p 1417
 Hapalia concolor, Moore, Lep Ceyl in, p 339, pl 181, fig 3,
 C & S no 4085
- d. Uniform grey, head and collar bright fulvous, palpi white below Underside whitish

Hab Ceylon, Tenasserim, Borneo Exp 36 millim

- b'. (Crypsiptya) Thorax of male with large fan of scales at base of fore wing below
- 5256. Pyrausta ceadesalis, Wik Cat xviii, p 639
 Botys deductalis, Wik Cut xviii, p 659, Hmpsn Ill Het ix, pl 172, fig 16, C & S no 4086
 Botys nereidalis, Led Wien ent Mon 1863, pp 371, 465, pl 9, fig 7
 Botys ausonialis, Snell Trans Ent Soc 1890, p 578
- 3. Uniform grey, head and collar with a slight fulvous tange; palpi white below. Fore wing with indistinct dark spot in cell and another on discocellulars; traces of a curved postmedial line. Hind wing with more prominent curved postmedial line. Underside whiter.

Hab Africa, Sikhim; Ceylon Pulo Laut, New Guinea. Exp 34 millim

b Fore wing of male with a glandular lobe on costa at two-thirds from base, a hyaline fovea in end of cell, vein 7 from well below upper angle of cell, 6 from below middle of discocellulars, the base of each curved downwards and with elongate foveas above them

5257. Pyrausta foviferalis, n sp

3. Differs from incoloralis in the lines of fore wing being better defined and with a rufous tinge, the postmedial line nearly straight from costa to vein 4, then sharply retracted almost to lower angle of cell and waved to inner margin. Hind wing with the line nearly straight from costa to vein 2

Hab Thayetm o, Burma (Watson) Eap 26 millim Type in

B. M.

- SECT II. (Nascia) Hind tibiæ of male with the outer medial spur minute
 - A Antennæ of male with no tooth on 3rd joint or excision at base of shaft.
 - a Covæ of male without tufts of hair.
- 5258 Pyrausta rubellalis, Snell Trans Ent Soc 1890, p. 577. Botys coactalis, Snell Trans Ent Soc 1890, p. 577
- d Rufous, palpi below and pectus pale. Fore wing with the costa orange towards apex, faint traces of an antemedial line, of a discocellular spot, and of a postmedial line excurved from costa to vein 2, along which it is retracted, cilia orange. Hind wing fuscous brown, with traces of excurved postmedial line retracted along vein 2, the cilia orange from apex to vein 2.

 Hab. Sikhim, Tenasserim. Exp. 24 millim.

5259. Pyrausta bisignata, Butl Ill Het vii, p 98, pl 135, fig 11

Bright ochreous Fore wing slightly suffused with fuscous, a black spot in cell and larger spot on discocellulars, traces of a curved postmedial line bent inwards at vein 2. Hind wing fuscous, with the cilia bright ochreous

Hab. Simla, Dharmsála. Exp 24 millim.

- 5260. Pyrausta paupellalis, Led Wien. ent Mon. 1863, p. 469, pl. 10, fig 6, C & S no 4072
- d. Head, thorax, and fore wing orange-yellow, abdomen whitish. Fore wing with the costal area slightly suffused with rufous and fuscous, a dark sinuous outwardly-oblique antemedial line, a discocellular lunule, a postmedial line highly excurved from costa to vein 3, then bent inwards. Hind wing whitish, with traces of a postmedial line bent outwards between veins 5 and 2, both wings with marginal dark line.

Hab. 'India'; Ceylon. Exp 16 millim

5261. Pyrausta obliquata, Moore, Lep. Atk p 224, C & S no 4186. Leucocraspeda missoralis, Swinh A M N H (6) xiv, p 145

Ochreous; palpi fulvous, white below Fore wing with the basal half of costal area fulvous, an antemedial outwardly-oblique rufous line dentate on vein 1, a black speck in cell and discocellular lunule with a fascia from it to outer margin at vein 2, the outer area between lower angle of cell, vein 5, and outer angle suffused with fulvous, a postmedial rufous line, outwardly oblique from costa to vein 5, then dentate and retracted along vein 2 to near lower angle of cell Hind wing with the costal area whitish; a postmedial minutely dentate line retracted along vein 2 and joined by a streak from lower angle of cell; the outer area suffused

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PYRAUSTA

with fulvous from costa to vein 2, both wings with marginal dark line and line through the cilia

Hab. Sikhim, Khásis, Nágas, Ceylon, Tenasserim. Exp.

24 millim

5262 Pyrausta coclesalis, Wik Cat xvni, p 701
Botys itemalesalis, Wik Cat xix, p 996, C & S no 4061
Botys stienualis, Wik Cat xxxiv, p 1409, C & S no 4075
Botys interfusalis, Wik Cat xxxiv, p 1443
Botys lentalis, Feld Reis Nov pl 135, fig 44, C & S no 4063

Ochreous brown; palpi fulvous, white below Fore wing with



Fig. 235 —Pyrausta coclesalis, &

the veins and costal and outer areas darkest; an obliquely waved antemedial line, a dark discocellular speck, a postmedial dark line highly excurved from vein 5 to 2, where it is much bent inwards Hind wing pale the

outer area dark, a postmedial line highly excurved from vein 5 to 2, then incurved

Larva feeds on bamboo

Hab China, Formosa, throughout India and Burma, Borneo, Java, Sumbawa Exp, ♂ 28, ♀ 30 millim

5263 Pyrausta acutidentalis, n sp.

Q. Ochreous suffused with brown, palpi fulvous, white below. Fore wing with indistinct outwardly oblique antemedial line, traces of a dark spot in cell and line on discocellulars; a dark postmedial line with an ochreous band on its outer edge, straight from costa to vein 3, then highly dentate and bent inwards at vein 2. Hind wing with minutely dentate postmedial line running obliquely from the costa to outer margin at vein 2 and with an ochreous band on its outer edge.

Hab Sikhim (Dudgeon) Exp. 32 millim Type in B M

5264. Pyrausta bambusalis, Moore, Lep. Atk p 222, C & S no 4084.

J. Ochreous; palpi fulvous, white below. Fore wing with the costa tinged with fulvous; an oblique sinuous antemedial fuscous line; a speck in cell and discocellular lunule, a postmedial line nearly straight from costa to vein 2, along which it is retracted, then bent out again, a submarginal series of dentate fuscous marks diminishing to outer angle. Hind wing with postmedial line outwardly oblique from costa to vein 2, then retracted to cell and obsolescent, a submarginal series of dentate marks diminishing to and terminating at vein 2

Hab. Sikhim, Khásis. Evp. 38 millim

5265 Pyrausta fraudulentalis, Warr A M. N. H (6) xvi, p 474

3. Rufous with a slight purplish tinge; palpi white below; abdomen ringed with white, the anal tuft tipped with white, wings with a broad yellow postmedial band from below costs of fore wing to outer margin of hind wing above analangle, cilia fulvous yellow, inner area of hind wing yellowish

Hab. Khásis Eap 30 millim

5266 Pyrausta diniasalis, Wlk Cat xviii, p 649

Bright yellow, palpi fulvous, white below, male with the anal tuft black. Fore wing with traces of a dark subbasal line, an antemedial line across the cell, a speck at middle of cell, with an oblique line below it from median nervure to inner margin, a fuscous reniform discocellular spot with white lunule on it, a waved fuscous postmedial line, strongly bent outwards between veins 5 and 3, a waved submarginal line, bent inwards below vein 3 and with the area beyond it rufous except at apex. Hind wing with a dark discocellular spot; a waved postmedial line, strongly bent outwards between veins 5 and 3, a waved submarginal line, with the area beyond it tinged with rufous, a series of dark marginal striæ, both wings with a fuscous line at base of cilia, which are pure white at tips

Hab Shanghai; Dharmsála Eap 34 millim

- b. Male with thick tufts of favon-coloured hair from base of fore covee and of white hair from the end of the covee, mid legs with large tufts of long black and white spatulate hair from the covee, and the tibue clothed with rough hair
- 5267 Pyrausta bambucivora, Moore, Lep Atk p 224, C & S no 4129 Nascia aienalis, Hmpsn Ill Het ix, p 163, pl 173, fig 29
- c. Flesh-colour tinted with yellow, palpi white below; from white at sides. Fore wing with the veins slightly redder, the basal half of costa white, a faint dark speck at lower angle of cell; the cilia fuscous. Hind wing straw-colour, with the apex tinged with fuscous

The typical specimen from Jubbulpore has the costal area of fore wing on upper and under sides suffused with fuscous, most

prominently from cell to outer margin

Larva green, turning red before pupating, lives in rolled-up leaves of bamboo

Hab. Khásis, Jubbulpore, Ceylon Exp 32 millim

- 5268 Pyrausta citrinalis, Wari A M N H (6) ix, p 302 Hapalia lutealis, Butl Ill Het vii, p 19 (nec Dup)
- Q. Bright yellow, palpi white below, from white Fore wing with the apex very acute, a slightly deeper yellow mark at lower

angle of cell, the cilia fuscous at base, pure white at tips. Hind wing dull straw-colour.

Hab Dharmsála. Exp 30 millim

- B Antennæ of male with a tuft of hair on inner side of basal joint, the base of shaft excised, flattened, and contorted
- 5269 Pyrausta torridalis, n sp
- d. Rufous brown suffused with fuscous, except the outer third of wings. Fore wing with indistinct waved antemedial line, diffused blackish discal patch, a minutely waved postmedial line excurved from costa to vein 2, then retracted to below angle of cell and bent outwards again in interno-median interspace. Hind wing with minutely waved postmedial line, excurved from costa to vein 2, then obsolete, ciha blackish from apex of fore wing to vein 2 of hind wing.

Hab. Nágas (Doherty). Evp 28 millim Type in coll Elwes

- C. (Gyptitia) Antennæ of male with a small tooth on inner side of 3rd joint, hind wing with the bases of vein 1 c and median nervure fringed with long hair on underside.
- 5270. Pyrausta ochracealis, Wlk Cat. xxxiv, p 1446.
 Gyptitia gonialis, Snell Tyd. v Ent xxvi, p. 138, pl 8, fig 9 a, b
 Hapalia denticulosa, Moore, Lep Ceyl III, p 337, pl 183, fig 8,
 C & S no 4087

Bright orange, palpi white below. Fore wing with indistinct oblique antemedial line slightly angled below the cell, a dark speck in the cell and elongate discocellular annulus; a sinuous postmedial line much bent outwards between veins 5 and 2, along which it is recurved to the angle of cell, a diffused fuscous submarginal dentate band bent outwards between veins 5 and 2. Hind wing with remiform discocellular mark, a postmedial line much bent outwards between veins 5 and 3, an apical fuscous patch, from which arises a diffused dentate submarginal line bent outwards between veins 5 and 2, both wings with a series of dark specks just inside the margin, the cilia pale fuscous, with a dark line through them

Hab Ceylon, Nágas, Burma; Java; Celebes Exp 28 millim.

Genus TEGOSTOMA.

Tegostoma, Zell Isis, 1847, p 581 Emprepes, Led Wien ent Mon 1863, p 360 Æschremon, Led Wien ent Mon 1863, p 362

Type, T. comparale, Hubn.

Range. Neotropical, Nearctic, and Palæarctic regions, S Africa; Afghanistan, N W. Himalayas; North-western, Western, and Southern India

Palpi porrect, the 2nd joint slightly fringed with hair below,

the 3rd naked, maxillary palpi minute and filiform, frons with a large flat corneous plate excised in front; antenne of male ciliated, legs smoothly scaled. Fore wing long and narrow, male with a slight fovea on underside above the base of vein 7, which is bent downwards; vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8.

5271. Tegostoma comparale, Hibn Samml eur Schmett, Pyr fig 126. Pyralis glaucinalis, Hubn Samml eur Schmett, Pyr fig 127 Pyralis tenebrosalis, Wilk Cat xxxiv, p 1235, C & S no 4467. Scopula fotalis, Swinh P Z S 1885, p 875, pl 57, fig 9, C & S no 4150.

Head, thorax, and abdomen grey suffused with fuscous brown. Fore wing grey suffused with brown and irrorated with fuscous,



Fig 286
Tegostoma comparale, 5. ‡

dark spots at middle and end of cell: a dark medial band from median nervire to inner margin; a dark postmedial spot on costa, with an irregular line highly excurved between veins 7 and 4 arising from it, a marginal series of dark specks. Hind wing pale, with the marginal areasuffused with fuscous, or wholly suffused with fuscous, a curved

dark postmedial line from costa to vein 2, where it is crossed by a pale patch.

The amount of grey, brown, or fuscous suffusion on fore wing

varies greatly.

Hab. Mediterranean subregion; N.W. Himalayas; Poona, Combatore. Exp., & 16-20, Q 20-22 millim.

5272. Tegostoma flavidum, Moore, P Z S. 1881, p 871, C. & S no 1892

d. Head, thorax, and fore wing pale lemon-yellow; abdomen white tanged with fuscous towards extremity. Fore wing with indistinct medial and postmedial red lines, the former obsolete towards costs, the latter bent inwards. Hind wing cupreous fuscous, pale at base.

Hab. Allahabad; Punjab. Exp. 16 millim.

Genus NOCTUELIA.

Noctuelia, Guen. Delt. & Pyr p 118 (1854). Aporodes, Guen. Delt & Pyr. p 159.

Type, N. superba, Frr, from W. Asia and Persia Range. Palmarchic region, N. and W. India.

Differs from Tegostoma in the palpi typically being fringed with long hair below, the frons with a rounded prominence and no bilobed corneous plate, mid tibus fringed with spinous hair.

SECT 1. Palpi with the 2nd joint fringed with long hair below, fore wing of male with a slight fovea on underside above base of vein 7.

5273 Noctuelia floralis, Hubn Samml eur Schmett, Pyr fig 142
Pyralis stygialis, Treitschke, Schmett Eur vii, p 176.
Herbula meleagrisalis, Wlk Cat xvii, p 324, C & S no 4362
Eudorea tiansversalis, Moore, A M N H (5) 1, p. 235, 1d
2nd Yarkand Mission, Lep p 14, C & S no 4298

Greyish ochreous suffused with brown abdomen banded with fuscous Fore wing with diffused brown basal, subbasal, medial,



Fig 237 -Noctuelia floralis, of

and submarginal bands, narrow black ante- and postmedial bands overlaid with grey scales, the latter excurved between veins 6 and 4, two black discocellular spots conjoined into an oblique streak and surrounded by grey scales Hind wing pale dull orange, with a slight dark mark at lower angle

of cell, a black-brown postmedial band angled at vein 2 and a black-brown marginal band. Underside clear ochreous; fore wing with a black spot in cell and oblique discocellular band, both wings with black postmedial line.

3

The European form is usually larger and darker than the Indian race meleagrisalis, the hind wing being more or less suffused with brown, in the variety signalis both wings being wholly suffused with brown

Hab Europe, Syria, Yarkand, Afghanistan; N.W. Himalayas, Punjab, Sind, Bombay Exp. 16-20 millim

5274. Noctuelia fractilinealis, Ersch, Fedtschenko, Reise Turk, Lep. p 77, pl 5, fig 82

Head, thorax, and abdomen white suffused with pale brown Fore wing pale brown, the scales pencilled with white, a dark antemedial line with white inner edge acutely angled below costa and slightly below cell, a comma-shaped white discocellular mark with black spot at lower angle of cell, a dark postmedial line with white outer edge very much excurved beyond cell, white and dark specks on costa towards apex, a dark marginal line, the base of cilia white. Hind wing brown; the cilia white

Hab. Persia, Turkestan, Kashmir. Exp. 18 millim.

SECT II Palpi with the 2nd joint smoothly scaled, male with paired tufts of hair from behind the eyes meeting over vertex of head, and no fovea beyond cell of fore wing.

5275 Noctuelia fuscinervis, n sp.

c. Head and thorax dingy brown variegated with fuscous

black, the 3rd joint of palpi black, the tufts behind the eyes ochieous. Fore wing dingy blown, the veins fuscous black, diffused curved fuscous subbasal, antemedial, and postmedial lines, black spots in cell and on discocellular. Hind wing pale neddish blown

Hab Murree (Harford) Exp 20 millim Type in B M.

Genus HELIOTHELA

Heliothela, Guen Delt & Pyr p 152 (1854)

Type, H at alis, Hubn, from Europe

Range Paleauctic, Ethiopian, Oriental, and Australian regions Palpi poirect, the 2nd joint fringed below with hair towards extremity, the 3id prominent, maxillary palpi triangularly scaled, antenna of male somewhat thickened and minutely chatted, legs short, the tibia smoothly scaled, with the spurs moderate, wings short and broad. Fore wing with vein 3 from close to angle of cell, 4,5 from angle, 7 well separated from 8,9, 10 free. Hind wing with vein 3 from close to angle of cell, 4,5 from angle, 6,7 from upper angle, 7 anastomosing with 8

5276 Heliothela ophideresana, Wik Cat xxviii, p 459, C § 8
no 4526
Heliothela puelle Butt W. Het xii p 93 pl 134 fg 15

Heliothela pusilla, Butl Ill Het vn, p 93, pl 134, fig 15

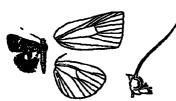


Fig 238 Miliothela ophideiesana, d 💈

Black-brown, abdomen with pale rings. Fore wing irrorated with a few steel-blue scales, which form a small spot at end of cell, an oblique whitish postmedial band from costa to vein 5 and more prominent on underside lind wing orange-yellow, with a black medial patch from costa to lower angle of cell, a very broad

marginal black band, widest at apex and from vein 2 to anal angle

Hab Dharmsála, Caylon, Madagascar, Australia Eip 17

millim.

Genus SIMÆTHISTIS, nov

Type, S. tricolor, Butl

Range NW Hunalayas, Assam

Palpi porrect, the 2nd joint fringed below with long hair, the 3rd prominent, maxillary palpi minute, from with a rounded prominence, antenna annulated Fore wing with veins 3, 4 from angle of cell, 5 from well above angle, 5, 7, 8, 9, 10, 11 given off at regular intervals. Hind wing with veins 3, 4 from angle of cell, 5 from middle of discocellulars, 6, 7 from upper

ŧ

angle, 8 approximated to 7 for a short distance beyond end of cell, but not anastomosing with it

5277 Simæthistis tricolor, Butl Ill Het vii, p 95, pl 134, fig 18

Black-brown with a golden tinge and irrorated with yellow scales, palpi white below at base, abdomen with palerings Fore



Fig 239 Simethistis tricolor, d.

wing with a small white spot near base of cell and a large white spot in end of it, a diffused yellow patch beyond the cell, two postmedial white specks on costa Hind wing with large white spot in end of cell, with a yellow line from it to inner margin, some diffused yellow scales beyond the cell, the cilia white below apex

and towards outer angle of each wing Underside with the basal two-thirds of each wing suffused with golden yellow

Hab Dharmsála, Khasis Exp 16 millim

Species recorded as Pyralidæ which are omitted

Eschremon disparalis, Herr-Schaff, C & S no 4364, is from Europe and Afghanistan

Ambra cæruleata, Hmpsn Ill Het 1x, p. 179, pl 174, fig 29, 18

a Tineid near Choreutis

Anoristia venosella, Moore, C & S no 4600, is from Yarkand Botys annulalis, Wlk, C & S no 4044 Type lost, description not recognizable

Botys brevilmealis, Wlk, C & S no 4048 Type lost, description not recognizable

Botys dryopealis, Wlk, C & S. no 4054 Type lost, description not recognizable

Botys interruptalis, Wlk, C & S no 4060 Type lost, description not recognizable

Botys manutalis, Led, C & S no 4058, is from Amboina

Botys myrmalis, Wlk, C & S no 4066. Type lost; description not recognizable.

Botys nephealis, Wlk, C & S no 4067 Type lost, description not recognizable

Botys pharisalis, Wlk, C & S no 4073, is from Australia Cataclysta magnificalis, Hubn, C & S no 4422, is from

Cornifrons ulca atalis, Led, C & S no 4228, is from Syria Chilo lineusalis, Wlk, C & S no 4675 Type lost, description not recognizable

Dapha valeusalis, Wlk, C & S. no 4643, belongs to the Tineidæ. Ebulea camillalis, Wlk, C & S. no 4130 Type lost, description not recognizable.

Eudorea granitalis, Moore, C. &. S. no 4296, is from Yarkand Hapalia dialis, Wlk, C & S. no 4088. Type lost, description not recognizable

Hapaha tharsalis, Wlk, C & S no. 4104 Type lost, description not recognizable

Hedylepta mobesalis, Wlk, C & S. no 4347 Type lost, description not recognizable

Hapalia flavalis, Schiff, C & S. no 4091, is from Europe

Homæosoma getusalis, Wlk, C. & S no 4608 Type lost, description not recognizable

Hypocosmia definitalis, Rag Ann Soc Ent. Fr (6) x, p. 505, pl 7, fig 11, is from Venezuela

Lampea muscosella, Wlk, O & S no. 4645. Type lost; description not recognizable

Letoa patulella, Wlk, C & S no. 4641. Type lost, description not recognizable

Libuna solitella, Wlk, C & S no 4706 Type lost, description not recognizable

Midea rectalis, Wlk xxvii, p 21, C & S no 4731=Arsacia saturalis, vol. ii p 567 Both the generic and specific names have priority

Moca lithosoides, Moore, C & S. no. 4638, is a Tineid.

Moca velutina, Wlk, C & S. no 4639, is a Timeid

Myelors basifuscalis, Wlk, C & S. no. 4559. Type lost, description not recognizable.

Myelous marsyusalus, Wlk, C & S. no. 4561 Type lost, description not recognizable

Myelors griscella, Moore, C & S no 4647, is from Yarkand.

Myelors undulosella, Moore, C & S. no. 4648, is from Yarkand.

Nephopteryx colusalis, Wlk, C & S. no. 4573 Type lost, description not recognizable.

Nephopteryx arguadesahs, Wlk., C & S no. 4574 Type lost; description not recognizable

Nephopteryx cyllusalis, Wlk, C & S. no. 4576. Type lost, description not recognizable.

Nephoptery etolusalis, Wlk, C & S no 4577 Type lost, description not recognizable

Nephoptery harpaxalis, Wlk, C & S no 4579 Type lost, description not recognizable

Nephopteryz signella, Rag, C & S no 4583, is from Afghanistan Nephopterya phycisella, Wlk, C & S. no. 4585 Type lost, description not recognizable

Oligostigma crassicornalis, Guen, C & S no 4408, is from

Oligostigma gibbosalis, Guen, C & S. no 4409, is from Java, Celebes, &c

Phakellus a super alss, Guen, C & S. no. 4198, 18 from America

449

Phakellura translucidalis, Guen., C. & S no 4199, is from America.

Picnarmon discerptalis, Wlk., C & S no. 4315=Leucinodes imperalis, Guen., is from Honduras

Pyrausta ostrinalis, Hubn, C & S no 4336, is not Indian.

Pyralis farinalis, Linn, C. & S no 4446, is from Europe and Afghanistan.

Pyralis janiusalis, Wlk, C & S. no. 4452 Type lost; description not recognizable.

Pyralis palesalis, Wlk, C & S. no. 4455 Type lost, description not recognizable.

Rehemina physidalis, Wlk, C & S. no 4139. Type lost; description not recognizable.

Samea continentalis, Guen, C & S no 4242, is from America Samea geographicalis, Guen, C. & S no 4244, is from America. Surattha acreonalis, Wlk, C & S. no. 4719 Type lost, description not recognizable.

Surattha annusalis, Wlk, C & S no 4722 Type lost, descrip-

tion not recognizable

Subrita bilineatella, Wlk, C. & S no 4642. Type lost; description not recognizable.

YOL IV.

APPENDIX.

This Appendix contains additions and corrections to the whole work, of which the present is the fourth volume. Species are indicated by their serial numbers, these being continuous throughout the four volumes when a letter is added to a numeral, the species thus marked follows that to which the number belongs. Thus the place of 36a Ocinara cyproba is immediately after 36 O signifera, Vol I, p. 34.

SATURNIIDÆ.

- 28 a Salassa thespis, Leech, Entom 1890, p 112. Salassa megastica, Swinh Trans Ent Soc 1894, p 153
- J. Differs from lola in the hyaline spot of each wing being arge and lumulate, hind wing with a black edge to the white ring of the occilus. Underside darker, with olive-yellow suffusion beyond the postmedial line.

2 dark grey-brown suffused with olive-brown; the hyaline

ocellate and postmedial spots larger.

The Sikhim male has some yellow suffusion towards apex of each wing.

Hab China, Sikhim; Khásis Ewp, of 154-166, 9 162 millim

31 Insert Cricula multifenestrata, H.-S Samml. aussereur Schmett fig 80, which has precedence.

BOMBYCIDÆ.

36 a Ocmara cyproba, Swinh Trans Ent. Soc 1894, p. 154, pl u, fig 1

Pure white; antennæ pale fulvous Fore wing with pale fuscous oblique band from lower angle of cell to inner margin, submarginal and almost marginal bands. Hind wing similar, but the medial band reduced to spots at end of cell and on inner margin, the marginal band incomplete.

Hab Khásis Exp 32 millim.

EUPTEROTIDÆ

- 50 a. Melanothrix nicevillei, n sp.
- d Head and thorax chocolate-brown, abdomen pale brown with darker rings, yellow below Fore wing pure white, the basal area chocolate-brown, extending to middle of costa and running out to three dentations beyond lower angle of cell, a marginal chocolate band, wide at costa, narrowing to inner margin, its inner edge darkest and waved, cilia with white patches towards outer

angle Hind wing pure white; a marginal narrow chocolate band with waved inner edge, and series of white spots on the cilia

Hab Toungoo, Burma (De Nickville) Exp. 78 millim. Type

m B M

- 58 a Pseudojana pallidipennis, Hmpsn Trans Ent Soc 1895, p 278
- d Pale ochreous brown irrorated with fuscous, antennæ fuscous Fore wing with slight dark suffusion from base through the cell and extending as dentate dark marks along the subcostal and median nervales, an oblique fuscous line from costa near apex to middle of inner margin, with three lines on a brownish ground beyond it, then two other lines; a series of fuscous specks from apex on a slight band of fuscous suffusion; a submarginal series of black specks connected by traces of a crenulate line. Fore wing with antemedial oblique diffused fuscous line followed by five lines, then a diffused fuscous band; a submarginal series of fuscous specks. Hab. Tenasserim. Exp. 130 millim.
- 69 Omit Eupterote fasciata, Moore, from the synonymy.
- 69 a Eupterote fasciata, Moore, Lep Ceyl in, p 544, pl 212, fig 1 Horanpella cumamomes, Moore, Lep. Ceyl in, p 544, pl 212, fig 2
- d. Differs from the och ipicta form of fabia in having the apex of fore wing more falcate, the rufous lines not waved.

2 wholly suffused with rufous, the apex of fore wing more acute and produced than in ochripicta, the area on each side of the

postmedial line with a purplish sheen.

Larva black, densely covered with red-brown sharply-pointed hairs—about eight fasciculated tufts to each somite—and with numerous longer white-tipped fuscous hairs; a lateral series of reddish-brown tubercles; an interrupted narrow white medial dorsal line with paired tufts of white hair meeting above it, head marked with pale yellowish, spiracles white; legs pale Foodplants, Elocarpus, Artocarpus, Michelia, and other trees.

Hab. Ceylon. Exp 116 millim.

- 70 a Eupterote axesta, Swinh Trans. Ent Soc. 1894, p 157, pl ii, fig 2
- 3 Differs from fabia in being buff Fore wing with two antemedial, one medial, and three postmedial lines reduced to spots; the double postmedial line not differentiated, the submarginal lunulate band complete. Hind wing with two medial waved lines, postmedial straight line, and prominent waved submarginal line

2 pale reddish brown, with the lines on basal area more or

less obsolete.

Hab. Khásis Exp. 62 millim

76 a Enpterote calandra, Swinh Trans Ent Soc. 1894, p 157
Differs from lineosa in being uniform bright yellow without traces of markings

Hab Khasis. Exp., of 64, 9 80 millim.

82. Eupterote vialis.

Q black-brown, thorax with the tips of the hairs prominently white, abdomen fulvous; the oblique line very indistinct on fore wing, obsolete on hind wing

85 a Nisaga rufescens, Hmpsn Trans Ent Soc 1895, p. 278

d. Head, thorax, and abdomen bright rufous, wings pale rufous with a silvery-grey tinge. Fore wing with ill-defined antemedial, medial, and oblique postmedial dark rufous lines. Hind wing with indistinct broad postmedial dark rufous band composed of diffused lines.

Hab. Shimoga, Mysore. Exp 50 millim.

SPHINGIDÆ

Genus DEGMAPTERA, nov.

Type, D mirabilis, Roths. Range Sikhim, Khásis.

Differs from *Polyptychus* in the fore wing having the apex acute; the outer margin crenulate and produced to a point at vein 7; the inner margin deeply excised before outer angle. Hind wing with the costa slightly excised before middle, very deeply at middle, and expanding into a large lobe before apex, the anal angle lobed, veins 6, 7 hardly stalked; 8 almost touching 7 near its origin

92 a Degmaptera mirabilis, Roths Nov. Zool p. 542.

Deep ferruginous red, variegated with ochreous and orangeyellow Fore wing with sinuous subbasal and antemedial lines with yellow between them, a fuscous-brown medial band from



Fig 240 - Degmantera mirabilis, 5

costa to vein 2; a small annulus at end of cell, an obliquely crenulate postmedial line; traces of an irregularly crenulate submarginal line, the area at apex and between lower angle of cell and outer angle variegated with ochreous and yellow and irrorated with ferruginous. Hind wing deep red-brown, with traces of red medial and submarginal bands. Underside variegated with ochreous and irrorated with ferruginous; both wings with distinct postmedial line.

Hab. Sikhim; Khasis. Exp 60 millim.

- Vol. I, p. 72. Cypa olivacea, Roths. Nov Zool. p 70—Probably from Borneo only; the locality Sikhim requires confirmation.
- 110. Insert (as a synonym) Clanis gigantea, Roths Nov. Zool. p 96.
- Pp. 84-94. The following species placed in Charocampa have the orifice in the basal joint of palpi more or less developed, and should be placed in the genus Theretra —120 alecto, Linn., 124. lycetus, Cram., 125 oldenlandia, Fabr, 126 silhetensis, Wlk, 128. insignis, Butl., 137 velata, Wlk, 139. helops, Wlk, 140. lucasi, Wlk., 141. butus, Cram, 144 pallicosta, Wlk.
- 130. Insert (syn.) Panacra hamiltoni, Roths. Nov. Zool p 82.
- 136. Insert Chærocampa castor, Wlk. Cat vni, p 152, which has priority.
- 137. Insert(syn) Metopsilus albomarginatus, Roths. Nov Zool. p. 78.
- 141. Insert (syn) Derlephila cyrene, Westw Cab Or. Ent. p. 13, pl. 6, fig 1.
- P. 104. Genus Pseudosphinx. Insert after Diludia Pseudodolbina, Roths. Nov. Zool p 91 (1894).
- 166. Insert (syn.) Pseudodolbina veloxina, Roths Nov. Zool. p. 91.
- 169. Insert (syn) Meganoton cocytondes, Roths Nov Zool. p. 89.

 A large form of discistriga, Q. Exp 175 millim Very dark and suffused with rufous. Andamans, Borneo; Australia. Insert also Meganoton khasianum, Roths. Nov. Zool p. 90.
- 181. Insert (syn.) Macroglossa burmanica, Roths Nov. Zool. p. 68.

NOTODONTIDÆ.

- 210. Insert Tarsolepis sommeri, Hubn. Samml. exot. Schmett, Noct. Gen. 1v, figs 1 & 2; which has precedence.
- 211 a. Dudusa nobilis, Wik. Cat xxxii, p 447
- d. Head and thorax pale reddish brown and buff; mesothorax with a pair of black spots; abdomen brown, with some black on dorsum. Fore wing reddish brown; a black speck on white patch at base, double crenulate ante- and postmedial lines approaching each other below the cell, an oblique dark fascia from middle of costa to outer angle; a white patch between the lines on costal area, traces of a submarginal dark line; a series of white and brown marginal lumules to each wing.

Hab. N. China, Khásis; Malacca, Celebes. Exp. 80-90 millim

Genus PLUSIOGRAMMA

Plusiogramms, Hmpsn Trans Ent Soc 1895, p 278

Type, P aurisigna, Hmpsn Range Tenasserim.

Palpi upturned, the 2nd joint broadly fringed with hair, the



Fig 241 —Plusiogramma aurisigna. 6

3rd minute and concealed, antennæ of male bipectinated to apex Fore wing with the outer margin somewhat excised from apex to vein 5, then oblique, vein 5 from near upper angle of cell, 6, 7, 8, 9 stalked, 10 free Hind wing with vein 5 absent, 6, 7 stalked, 8

connected with 7 by a bar at middle of cell

212 a Plusiogramma aurisigna, Hmpsn Trans Ent Soc 1895, p 278

o. Head and thorax deep chocolate, abdomen fuscous Fore wing deep chocolate, the base of inner margin pale, a subbasal golden spot below costa, a golden mark with speck below it on discocellulars in the form of an obliquely placed 'note of interrogation,', the area between the costa beyond middle and the outer angle suffused with grey, traces of a sinuous postmedial line and a minutely waved curved submarginal line, the outer margin grey below apex. Hind wing pale, the inner and outer areas suffused with rufous brown. Underside whitish, suffused and irrorated with rufous; a minutely waved submarginal line, almost obsolete on hind wing

Hab. Dawnat Range, Tenasserim. Exp 40 millim

Genus OMICHLIS

Omichlis, Hinpsn Trans Ent Soc 1895, p 279

Type, O_rufotincia, Hmpsn.

Range Burma

Palpi obliquely porrect, the 2nd joint fringed with hair, the 3rd prominent, an acute frontal tuft. Fore wing with the apex acute; the outer margin angled at vein 4, vein 6 from above angle of cell, 8, 9 anastomosing to form the areold. Hind wing with the outer margin slightly angled at vein 4, vein 5 from above middle of discocellulars, 6, 7 stalked, 8 running close along 7 at middle of cell.

213 a. Omichlis rufotincta, Hmpsn Trans. Ent Soc 1895, p 279

Q. Pale grey, thorax and fore wing suffused with pale rufous, head white, the palpi black at sides. Fore wing with traces of

numerous waved rufous lines, a black spot on vein 1 near base; some black specks on the postmedial line below the costa; traces of the orbicular and remiform stigmata with rufous outlines.

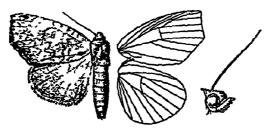


Fig 242 — Omichlis rufotincta, 9

Hind wing reddish grey, with a slight rufous mark near anal angle.

Hab E. Pegu, 5000 feet Exp. 50 millim

221 a. Phalera bilineata, n sp

Antennæ of male bipectinate for two-thirds length

Dark brown and grey, collar edged with black; abdomen fuscous. Fore wing with a waved black, almost basal line with small rufous patches beyond it, a waved black, almost medial line; the remform rufous on a grey patch, some grey patches beyond lower angle of cell; a prominent postmedial black line slightly excurved beyond lower angle of cell, a very irregular indistinct submarginal band, reddish on costal, greyish on inner half. Hind wing fuscous.

Hab Bhután, 2500 feet (Dudgeon); Khásis. Exp 56 millim.

Type in B. M

221 b. Phalera innotata, Swinh MS

Antennæ of male bipectinate; fore wing with vein 5 from middle of discocellulars, 6 from upper angle of cell.

o. Head and thorax black-brown; abdomen fuscous wing black-brown with a slight greyish tinge, the costal area paler and slightly purplish, tapering to apex. Hind wing pale fuscous.

Hab. Khásis Exp. 48 millim.

225 a. Gargetta albovittata, n sp

d. Head dark brown, palpi below and shaft of antennæ whitish; thorax brown and whitish, abdomen fuscous Fore wing fuscous, with a diffused whitish fascia on costal area leaving a dark fascia on costa from middle to near apex; the veins towards apex streaked with fuscous, a dark discocellular spot; some white specks on vein 1 and a marginal series. Hind wing fuscous, with marginal series of white specks.

Hab. Khásis Exp 40 millim. Type in B M

- 225 b. Gargetta lithosidia, Hmpsn. Trans. Ent Soc. 1895, p 280.
- o. Pale brownish ochreous. Fore wing with a rasp formed by corrugation of the membrane below the basal half of the cell, played on by the serrate costal edge of the hind wing, suffused with purplish fuscous except in the cell, a short black streak in end of cell; an almost straight ochreous submarginal line ending on outer margin above outer angle, a series of black strige on the margin. Hind wing whitish, slightly suffused with fuscous.

 Hab. Sikhim Exp 40 millim.

227 a. Turnaca delineivena, Swinh Trans Ent Soc 1894, p 159.

Q. Head, thorax, and fore wing greyish white slightly tanged with purple and rufous. Fore wing with dark streaks on median nervure and veins 2, 3, 4, 6, 7, the purple and rufous suffusion most prominent on inner area and median nervure. Abdomen and hind wing brown, the latter with the costs whitish

Hab. Khásis. Exp. 66 millim.

Genus EUTORNOPERA.

Eutornopera, Hmpsn Trans. Ent. Soc. 1895, p 280.

Type, E. argentifascia, Hinpsn.

Range. Bhután.

Palpi porrect, hairy, and not reaching beyond the frontal tuft; antennæ of male minutely serrate and fasciculate, abdomen long, with a forked anal tuft. Fore wing narrow, with the apex rounded; veins 3, 4 from angle of cell, 5 from middle of discocellulars; 6, 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 from angle of cell, 5 curved and from below middle of discocellulars, 6, 7 stalked; 8 running close along 7 to near end of cell

229 a. Eutornopera argentifascia, Hmpsn. Trans Ent Soc. 1895, p. 289.

d. Head yellowish white; the palm fuscous, thorax rufous,



Fig 243—Eutornopera argentifascia, d. 🕆

abdomen pale fuscous brown. Fore wing rufous; the costa pale ochreous, with a silvery white fascia below it, widest before outer margin, a similar fascia from the end of cell to outer margin; a broader diffused yellow fascia

from base to outer margin below median nervure and vein 2. Hind wing pale ochreous suffused with fuscous.

Hab. Bhután. Exp 44 millim

Genus STENADONTA.

Stenadonta, Hmpsn Trans Ent Soc 1895, p 281

Type, S cyttarrosticta, Hmpsn.

Range Bhután.

Palpi upturned, reaching the vertex of head, the 3rd joint minute, antennæ of male ciliated Fore wing long and narrow, the apex rounded, vein 6 from the middle of areole, which is long and narrow, 7, 8, 9 from beyond the areole, 10 from it Hind wing with vein 5 from middle of discocellulars, 6, 7 stalked; 8 running close along 7 to near end of cell.

229 b Stenadonta cyttarrosticta, Hmpsn Trans Ent Soc 1895, p 281

of Pale reddish brown suffused with fuscous Fore wing with the basal and discal areas suffused with rufous, very indistinct

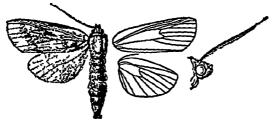


Fig 244.—Stenadonta cyttarrosticta, of

minutely waved double ante- and postmedial lines, the latter with some dark specks beyond it, a black streak in end of cell, continued along vein 5 as a short white streak. Abdomen and hind wing dark fuscous

Hab Bhután Erp. 45 millim.

230 a. Pydna tenebralis, n sp.

d Head, thorax, and fore wing ochreous irrorated with fuscous; palpi with the 2nd joint black at sides. Fore wing with curved ante- and postmedial lines, the latter incurved below vein 3, the area between them suffused with rufous, with a black discocellular speck; a fuscous shade from apex, a submarginal series of dark specks. Abdomen and hind wing fuscous. Underside pale.

Hab Sikhim (Dudgeon). Exp 40 millim Type in B. M.

230 b Pydna aroides, Swinh A M N.H. (6) xvii, p 360.

3. Sulphur-yellow Fore wing with the medial area irrorated with rufous, the rest of the wing with fuscous and rufous, an indistinct antemedial line and similar postmedial line, both highly angled below the costa and reduced to specks towards inner margin, the latter minutely dentate from costa to vein 4, an oblique fuscous shade from apex to angle of postmedial line; a submarginal

series of dark specks. Hind wing bright ochreous without irroration

Hab. Khásis. Evp 36 millim.

232 a. Pydna bela, Swinh. Trans Ent Soc 1894, p 159

o. Head, thorax, and abdomen bright orange irrorated with red; palpi blackish at sides. Fore wing with indistinct oblique fuscous streak from apex to end of cell traces of a submarginal series of dark specks. Abdomen and hind wing ochreous with a slight red tinge. Underside whitish

Hab Khásis Emp 36 millim

233. Pydna nana 2 with the hind wing whitish Travancore.

234. Pydna pallida. Transfer to Sect. B

Omit Pydna notata, Swinh (v Vol. IV, p 25), and insert Pydna essa, Swinh A M N H. (6) xvii, p. 360.

236 a. Pydna crenelata, Swinh A M. N H (6) xvii, p. 361.

of Grey suffused with pale brown; palpi black at sides. Fore wing with the inner area and a fascia from median nervure to outer margin suffused with brown, some black specks below basal half of costa and on median nervure, a black spot below origin of vein 2, two obscure marks beyond the discocellulars, a highly crenulated double postmedial line prominent from costa to vein 4, then obsolescent, met by an oblique rufous streak from apex, a marginal series of black specks. Hind wing fuscous brown, the calla grey. Underside fuscous, with the costa and outer margin of each wing yellowish.

Hab Khásis Ewp 36 millim

236 b. Pydna rosacea n sp.

d Head pale; thorax and abdomen brownish ochreous Fore wing pale pinkish, the basal inner area to end of cell brownish, with fulvous-yellow suffusion at base and on inner margin, slight ante- and postmedial series of black specks, a pale dash in cell and round discocellular spot, a prominent postmedial black spot on costs and marginal series of specks; two diffused oblique fuscous bands from near apex interrupted by the pinkish vens. Hind wing fuscous, with a pinkish tange towards margin, the cilia pale.

The Pegu specimen is without the black specks and spot on fore wing, and has the inner of the two oblique bands from apex much

more prominent

Hab Khásis, Pegu Exp. 36 millim. Types in coll. Elwes and B. M.

244 a. Pydna acyptera, n sp

Antennæ of male mmutely serrate, fore wing with the apex acute, the outer margin oblique

Bright yellow; collar with a brown tinge; palpi black at sides. Fore wing irrorated with fine rufous and black scales; two indistinct crenulate rufous antemedial lines angled at middle and two similar oblique lines from apex, the inner running to middle of inner margin; a prominent medial black spot below the cell; postmedial and submarginal series of black specks on the veins. Hind wing suffused with rufous brown, except the apical and outer areas.

Hab. Khásis Exp. 60 millim. Type in coll. Elwes.

247 a. Ramesa doculis, Wth Cat x1, p 735, C. & S no 2039.

Greyish brown; patagia greyer, metathorax blackish. Fore wing with a broad pale fascia from base below median nervure to inner margin, black streaks in cell and on vein 1 at base, two dark curved postmedial lines, the inner very indistinct, a submarginal series of black specks.

One specimen is redder, especially from lower angle of cell of

fore wing to outer margin

-Hab Simla, Sikhim Exp. 34 millim.

249 will stand as Pydna albistriga and will form Sect III of Pydna -Antennæ of male minutely fasciculate. Fore wing with veins 7, 8, 9 stalked Hind wing with a fold on inner area below containing a tuft of long fulvous hair.

- Vol. I, p 144 Anticyra is preoccupied in the order Neuropiera, so Dinara will stand.
- 256 Fentonia obliquiplaga Antennæ of male with small fascicles of cilia.

258 a Fentonia viridinota, n sp

d. Head and abdomen purplish brown; thorax and anal tuft bright yellow-green Fore wing red-brown, irrorated with black and green; a bright yellow-green patch on middle of inner area, another on costa beyond middle with a white spot on it, a submarginal series of black specks with some white beyond those in the middle; a marginal series of green spots Hind wing red-brown.

Hab. Bhután (Dudgeon). Exp 30 millim. Type in B. M.

258 b. Fentonia canifusa, n sp

J. Head and thorax red-brown, patagia and metathorax grey: abdomen dark red-brown, with grey on dorsum and terminal segment Fore wing red-brown, the inner area irregularly suffused with grey; a large irregular patch of grey from apex to vein 3; an obscure grey discocellular spot, ill-defined double waved subbasal, ante- and postmedial lines. Hind wing brown suffused with grey Underside whitish grey, except the discal area of fore wing.

Hab. Khásis. Exp 48 millim. Type in coll Elwes.

268 Stauropus perdix, *Moore*, *Lep. Atk* p 58, pl. 3, fig. 3; *C. & S.* no 988, has precedence (see no 1005).

300. ? Hyperæschra variegata. Transfer to Fentonia (Vol I, p. 147), Sect. 1 b

303 a. Lophopteryx crenulata, n sp.

Differs from saturata in the colour being brighter rufous. Fore wing with the outer margin highly crenulate, the aute- and post-medial lines more waved and less dentate, the outer area more or less suffused with ochreous. Hind wing paler, with the patch at anal angle smaller.

Hab. Yatong, Sikhim, 13,000 teet (Bingham). Exp. 44-50

millim. Type in B M.

Genus LEUCOLOPHA, nov.

Type, L undulifera, Hmpsn.

Range. Khásis.

Palpi porrect and reaching just beyond the frontal tuft; antenna of male fasciculate, with a tuft of white hair on basal joint; tibus fringed with long hair. Fore wing broad, the apex acute, the inner margin evenly rounded; vein 6 from upper angle of cell; 7 from end of arcole, which is formed by 9 and 10 anastomosing strongly with 8. Hind wing with veins 6, 7 stalked; 8 running along cell to middle.

314 a. Leucolopha undulifera, n. sp.

d. Brick-red, slightly irrorated with grey, the tuft on basal joint of antennæ pure white. Fore wing with a brown line from base of inner margin, with an upward curve to upper angle of cell, then with a downward curve to apex, a short subbasal line; a prominent straight medial line with pale outer edge not reaching

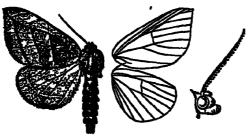


Fig. 245 — Leucolopha undulifera, o. 1

costa; postmedial and submarginal lines angled below costa, the latter most prominent. Hind wing paler, with traces of medial and submarginal curved lines; clua of both wings brown.

Hab. Khásis. Exp. 50 millim. Type in coll. Elwes.

Genus EUPLEXIDIA.

Euplexidia, Swinh MS

Type, E noctuiformis, Swinh.

Range Khásis

Palpi upturned, the 2nd joint reaching vertex of head and thickly scaled, the 3rd oblique; antennæ of male minutely ciliated. metathorax and medial abdominal segments with dorsal tufts, tabiæ hairy. Fore wing with the apex rounded; vein 10 anastomosing slightly with 8, 9 to form the areole. Hind wing with vein 5 almost obsolete and from middle of discocellulars; 6, 7 stalked, 8 leaving the cell close to the base

314 b. Euplexidia noctuiformis, Swinh MS

6 Head, thorax, and abdomen pale rufous, frons white, collar, tegulæ, and metathoracic tuft tipped with grey. Fore wing pale rufous irrorated with black; some grey-green and black markings on costa and a small subbasal spot, a black ——shaped mark below end of cell, with fuscous in the loop and grey-green below the top

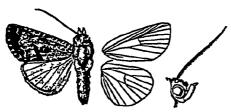


Fig 246 -Fuplexidia noctuiformis, of

stroke, a speck in ceil and traces of a grey-green outline to the obscure reniform stigma; a postmedial black and grey-green mark on inner margin, an indistinct sinuous whitish submarginal line. Hind wing silvery white, with a indistinct postmedial line,

fuscous marginal line, underside with indistinct postmedial line, incurved and obsolescent below vein 6

Hab Khásis Exp 38 millim

319 a Ichthyura anastomosis, Lum Syst Nat 1, 2, p 824

- d. Brown; the vertex of head and a triangular patch on collar and thorax dark chocolate. Fore wing with a greyish tinge on basal area, two oblique fuscous-edged grey antemedial lines, a discocellular line on an obscure round stigma, a postmedial line excurved below costa and slightly curved from vein 3 to inner margin, an obscure waved submarginal line, with some greyish patches on its inner edge from costa to vein 3, where it is bent inwards; some rufous at middle of outer area
- 2 paler, with the thorax and fore wing ochreous in tone, the latter with the apical area rufous. Hind wing with an indistinct medial line

Hab. Europe, Siberia, Ceylon Exp, 38, 9 46 millim

Genus ACIDON, nov.

Type, A paradoxa, Hmpsn

Range. Bhutan.

Palpi obliquely upturned, the 2nd joint reaching apex of frontal tuft, the 3rd long and spatulate at extremity, antenne of male fasciculate, patagia with long spatulate scales; abdomen with large dorsal tuft on 1st segment and smaller tuft on 2nd, tibes moderately hairy. Fore wing very long and narrow, the apex produced and somewhat falcate, the outer margin very oblique; veins 2, 3 stalked, 4 from angle, 5 from middle of discocellulars, 6 from upper angle; 7, 8, 9 stalked, 8 being curved down to near 7, then up to the costa, 10, 11 free, 10 being curved down close to 8, 9. Hind wing long and narrow, veins 3, 4 from angle of cell; 5 from middle of discocellulars, 6, 7 stalked, 8 from middle of cell

321 a Acidon paradoxa, n sp.

d. Head, thorax, and fore wing purplish, irrorated with fuscous, the last with sinuous antemedial and medial ochreous and fuscous lines, traces of a postmedial line terminating at outer angle, some



Fig 247 -Acidon paradoxa, S. 1.

submarginal white specks Abdomen fuscous with an ochreous tinge Hind wing fuscous, pale at base and with a small mark above anal angle

Hab Bhutan, 2500 feet (Dudgeon). Exp. 32 millim Type m

B.M.

CYMATOPHORIDÆ.

332 a. Gaurena tenuis, n sp

2. Fuscous; build slender. Fore wing with the basal area greyish, bounded by an obliquely sinuous line; small, dark-edged, grey orbicular and remiform spots; an ill-defined sinuous grey line from lower angle of cell to inner margin, an irregular grey submarginal line joined by an oblique mark from apex. Hind wing grey

Hab. Yatong, Sikhim, 13,000 feet (Bingham). Exp. 34 milhm.

Type in B M.

332 b Gaurena argentisparsa, Dudgeon, MS

Head and thorax black and white; abdomen fuscous. Fore

wing grey irrorated with black; a black-edged white spot at base below median nervure, a white antemedial band edged by irregularly-waved black lines, a small black-edged white orbicular and large round reniform stigma, with a black-edged white band from it to inner margin, its inner edge dentate, a waved post-medial line with diffused white band beyond it forking to apex, some submarginal white specks and an irregular patch at anal angle, a marginal series of white lunules Hind wing fuscous, with traces of postmedial and submarginal lines towards inner margin.

Hab Yatong, Sikhim, 13,000 feet Exp 36 millim. Types in

coll Dudgeon and B M.

334 a Gaurena solena, Swinh A M N H (6) xiv, p 431

of. Antennæ somewhat thickened and flattened Head, thorax, and abdomen brownish grey. Fore wing silvery grey, the medial area suffused with rufous, and with two double dark lines on it which almost meet below the cell, a nearly straight erect postmedial line, an ochreous-white costal patch before the apex, with an indistinct dentate submarginal line arising from it, a dark marginal line; the cilia intersected with black. Hind wing fuscous, the basal area and a medial band paler, cilia pale, intersected with black.

Hab Khásis Exp. 44 millim

334 b Polyploca bifasciata, Hmpsn Trans Ent Soc 1895, p 281

d. Silvery greyish-white Fore wing with diffused ante- and postmedial fuscous bands, the former with slightly waved edges and oblique, the latter slightly excurved at middle; a fine oblique apical streak

Hab Sikhim. Evp 40 milhm.

336 a Polyploca galema, Swinh A M N H (6) xiv, p 431

G. Pale brown, palpi blackish; head and thorax darker brown Fore wing with subbasal dark line highly angled below median nervure; an antemedial double obliquely curved line slightly widening and filled in with dark brown towards costs, the area between it and subbasal line darker than ground-colour, with an indistinct waved line on it; a small dark round spot at middle of cell, with an indistinct highly crenulate medial line curving round it, a slightly sinuous curved double postmedial line dilated and filled in with dark brown at costs two indistinct waved submarginal lines; an oblique bent black streak from apex, a fine dentate black marginal line. Hind wing fuscous brown, with dark line through the cilia

Hab Khásis Evp 48 millim.

339 a. Polyploca polychromata, n sp

Q Head, thorax, and abdomen pale brown, the thorax variegated with rufous and dark brown scales. Fore wing with the

ground-colour pale brown, thickly irrorated with rufous and fuscous, a patch of bright yellow scales below base of cell, with some bright ferruginous beyond these, an antemedial band formed of three bisinuate dark lines, a quadrate white spot on middle of inner margin, a bright yellow fascia along vem 2, a black discocellular line, some bright ferruginous beyond cell, numerous indistinct sinuous dark lines on outer area, an oblique black streak from apex expanding into a diffused fuscous patch beyond lower angle of cell, a dentate submarginal white line, a marginal series of black specks. Hind wing pale fuscous.

Hab Sikhim (Moller) Exp 36 millim. Type in coll. Elwes

Vol I, p 184 The genus Polyploca has the eyes harry, whilst Palimpsestes, to which genus albicosta, Moore, and albibasis, Hmpsn, should be referred, has them smooth

344 Insert Toxoides undulata, Moore, P Z S 1867, p 45, C & S no 1650, which has precedence

SESIIDÆ

350. T. scolioides has the antennæ pectmated in male

355 a. Sciapteron xanthozonatum, Hmpsn Trans Ent Soc 1895, p 282

Antennæ minutely fasciculate, hind wing with vein 5 from close to upper angle of cell Black, palpi mostly golden yellow; frons ringed with white, collar and patagia fringed with yellow, abdomen with the 1st, 2nd, and 4th segments fringed with yellow, legs black and yellow, hind tarsi with the proximal joints fringed with black and grey hair, coxe with some grey hair Wings hyaline, with the veins black, the margins black, fore wing with a black discocellular band

2 with all the segments of abdomen banded with yellow, some yellow on inner margin of each wing near base, a few orange

scales beyond the discocellular band of fore wing Hab Tenasserim. Eap, 624, 230 millim

377 a. Adixoa cruentata, Swinh A. M. N. H (6) xvii, p 359

2. Head, thorax, and abdomen black, palpi marked with white and blood-red, the antennæ with blood-red, pectus whitish, abdomen marked with blood-red at sides, below, and on anal tuft; legs red and black. Fore wing with the basal half blood-red, the costa black, a broad medial black band, the outer area hyaime, with black streaks on veins and in interspaces, the margins black. Hind wing hyaline; the inner area, median nervure, and costa blood-red, a broad black discocallular band, the veins of outer area, outer part of costa, and outer margin black.

Hab. Khásis. Exp 16 millim

- 382 a Aschistophleps metachryseis, *Hmpsn Trans Ent Soc* 1895, p 282
- d. Head, thorax, and abdomen blackish; palpi golden yellow below, tibiæ and tarsi black ringed with orange. Fore wing black-brown. Hind wing golden yellow, with a broad black marginal band sending a streak inwards along median nervure. Underside of both wings orange, with broad black marginal band; fore wing with the costa and inner margin blackish, a black spot on discocellulars

Hab. Kalewa, Upper Burma. Exp. 16 millim.

SYNTOMIDÆ.

- 403 a Syntomoides semicineta, Hmpsn Trans Ent. Soc. 1895, p 282
- Q. Head, thorax, and abdomen black shot with green; frons dirty white, antennæ white at tips, collar and spot on patagia dull golden; abdomen with a pair of pinkish golden spots on 1st segment; a band on 5th segment, and lateral bands not meeting on dorsum on the 3rd and 4th segments. Fore wing black with a slight purple tinge; milky hyaline patches in and below cell, in the interspace above vein 2, and five patches beyond the cell, the one between veins 5 and 6 in the form of a short streak. Hind wing hyaline, with the veins and margins black.

Hab. Tenasserim Exp. 42 millim

405 a. Syntomoides quisqualis, Swinh A. M N. H (6) xiv, p 441

Frons white; antennæ tipped with white; meso- and metathorax with orange patches; abdomen with six orange bands, the extremity orange in female. Fore wing black, with a hyaline patch in cell; a large patch below the cell, sometimes with a black band across it, a large spot above vein 6 and two spots in the interspaces between veins 3 and 5. Hind wing hyaline, with the costal and apical areas broadly black; the marginal area black, and widest at vein 2.

Hab Khásis Exp 36 millim.

- 407 a Syntomoides ginorea, Swinh. A M N H (6) xiv, p 441, id Trans Ent Soc 1895, pl. 1, fig 8
- o. Black, from yellowish; antennæ white at tips; abdomen with yellow band on basal segment. Fore wing with large hyaline space in end of cell, a spot between bases of veins 2 and 3, a large space below vein 2; a streak above vein 6, with small spot above it above vein 7; an elongate spot on each side of vein 4. Hind wing with hyaline spot between end of cell and inner margin.

Hab Khásis. Exp. 22 millim.

415 Syntomis georgina = 412 S cyssea. The forms with the yellow and black from have been taken in coitu (Watson).

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433 a. Syntomis polyzonata, Hmpsn. Trans Ent Soc 1895, p 288

Q. Antennæ whitish at tip; from yellowish white, collar, tegulæ, and metathoracic band orange—abdomen with the bands on first and last segments broad; wings with the hyaline markings vitreous, the black areas rather wide. Fore wing with an orange spot at base; a large hyaline patch in cell, two in interno-median interspace divided by a black bar, two between veins 3 and 5, and one above vein 6 with a smaller patch above it, veins 2, 3 and 4, 5 closely approximated and without hyaline between them. Hind wing with orange patch on basal inner area, a hyaline speck in cell; a large patch below the cell and two patches between veins 3 and 5.

Hab. N. Khyen Hills. Exp. 40 millim

447. Syntomis blanchardi = 431. S. lepcha

458 a Syntomis plumalis, n. sp

d Head, thorax, and abdomen black-brown, frons, collar, and a patch on metathorax yellow; abdomen with short dorsal band on each segment and the underside yellow, wings hyaline. Fore wing with the costa and inner margin black, with some yellow scales towards base, the veins and a discocellular patch black, a marginal black band, narrow between veins 3 and 5. Hind wing with the veins, costal and outer margins black.

Hab Toungoo, Burma (De Nicéville). Emp 20 millim Type

ın B. M.

458 b. Syntomis annosa, Wik Journ Lann Soc m, p 188; Swouh. Cat Het. Mus. Oxon pl. n, fig`17.

Q. Frons and taps of antenna white, patagia with white spots; abdomen shot with dull metallic green and with a paired series of lateral white spots; wings black with slight whitish suffusion. Fore wing with large hyaline patches in and below cell; a spot in interspace above vein 2; five spots varying in size in the interspaces beyond the cell, the spot above vein 7 small. Hind wing with hyaline patch in cell; two patches below it and two beyond it.

Hab. Tenasserim; Singapore Exp. 50 millim

461 a Syntomis penanga, Moore, Lep. E. I C p 325

Antennæ bipectinate in both sexes. Black, the frons, collar, and a patch on metathorax orange; abdomen with five orange bands. Fore wing with orange streaks from base below costa and median nervure; a large hyaline spot in end of cell, and trifid spot below the end; a spot beyond the cell, bifid in one specimen, quadrifid in another. Hind wing hyaline suffused with orange, an apical black band narrowing to anal angle.

Hab Tenasserim; Penang Exp. 28 millim

ZYGÆNIDÆ.

477 a. Chrysartona flavigula, n sp.

J. Head, thorax, and abdomen black above, shot with brilliant metallic blue, below bright yellow; wings black, with the basal half shot with bright metallic blue, on hind wing running out to beyond the cell and to anal angle; hind wing with the cilia white. Hab. Khásis Exp. 20 millim. Type in coll Elwes

Genus SCAPTESYLIX

Scaptesylix, Hmpsn Trans Ent Soc. 1895, p 283

Type, S. hemichryseis, Hmpsn.

Range Burma.

Palpi projecting well beyond the frons; antennæ of female minutely chiated, tibiæ hairy, with the spurs long; wings short and broad. Fore wing with veins 2 and 3 from angle of cell; 4 from above angle; 5 from just below middle of discocellulars, 6 from near upper angle; 7, 8 stalked, 9, 10, 11 free Hind wing with vein 2 from near angle of cell, 4 from well above angle, 5 from near upper angle, 6, 7 on a long stalk; 8 connected with 7 by a bar at middle of cell.

481 a. Scaptesylix hemichryseis, Hmpsn Trans Ent Soc 1895, p. 283.

Q. Bright golden yellow, palpi with black ring on 3rd joint,



Fig 248 Scaptesylix hemichryseis, Q

antennæ dark; abdomen with the extremity black. Fore wing with the outer half black suffused with purple, and with a postmedial yellow spot on costa, its inner edge slightly angled outwards at lower angle of cell. Hind wing with the outer area black, broad at costa, tapering to anal angle.

Hab. Dawnat Range, Tenasserim Exp. 20 millim

501 a. Clelea bipuncta, Hmpsn Trans. Ent Soc 1895, p 283

J. Dark fuscous, suffused with very dark blue Fore wing with two postmedial white specks on veins 4 and 7.

Hab Combatore Exp 14 millim.

501 b. Clelea metacyanea, n sp

d. Black, head and thorax with leaden tinge; proboscis

fulvous; abdomen shot with metallic blue-green. Fore wing with the basal area leaden colour, a broad postmedial leaden-coloured band. Hind wing metallic blue above and below, leaving the apical parts of costal and outer areas black

Hab. Khásis. Exp 20 millim Type in coll Elwes

507 a. Goe sizala, Swinh. A. M. N H (6) xiv, p 441, ed Trans Ent. Soc. 1895, pl 1, fig 3.

3. Head and thorax black; the frons, shaft of antennæ, and collar shot with metallic blue, abdomen greenish black. Fore wing black, with metallic blue streak below base of costa; obsolescent hyaline streaks below costa, in cell, and interno-median interspace, and in the interspaces beyond cell. Hind wing hyaline, the veins black; the costal, outer and inner margins broadly black, the outer most widely so towards anal angle

Hab Khásis Exp 28 millim

Genus CHALCOSIOPSIS

Chalcosiopsis, Swinh A. M. N. H (6) xiv, p 442 (1894)

Type, O_variata, Swinh.

Range. Khásis.

Q. Palpr reaching just beyond the frons; antennæ minutely chiated; mid tibuæ with a minute pair of spurs, hind tibuæ with a long medial pair and minute terminal pair. Fore wing short and broad; the costa arched near base; the apex produced, the outer margin excised below apex, then much excurved; vein 3 from near angle of cell; 5 from just below angle of discocellulars, 6, 7, 8 stalked; 9, 10, 11 free; 12 short. Hind wing with the outer margin excised below apex, then much excurved, vein 3 from near angle of cell; 5 from near upper angle, 6, 7 stalked.

515 a. Chalcosiopsis variata, Swinh A M. N. H (6) xiv, p 442

2. Black-brown; palpi, frons, and neck marked with white, abdomen with segmental white rings; pectus and abdomen below



Fig 249 — Chalcostopens variata, 2. 1.

white. Fore wing with an oblique white band from costa before middle to vein 2 near outer margin; a short oblique white band from costa near apex, continued as a waved grey submarginal band sending a tooth inwards to meet the

oblique band at vein 2, cilia white at base. Hind wing with the

base fuscous; a large white patch from near end of cell to near outer margin, thence obliquely waved to inner margin before middle; the outer black area shot with metallic blue, cilia with the bases white, wholly white near apex

Hab. Khásis. Exp. 36 millim.

527. Insert Soritia bicolor, Moore, Trans. Ent. Soc. 1884, p. 355; C & S. no. 390; which has precedence

539 a Heteropan leis, Swinh A M. N H (6) xiv, p 442.

J. Very dark green. Fore wing with the cilia white at apex Hind wing fuscous black, with a large orange patch below apical half of costa Underside fuscous black; fore wing with a large orange postmedial patch below the costa, hind wing with a broad orange fascia below the costa interrupted by a black streak from the base

Hab. Khásis. Exp. 30 millim.

Genus HAMPSONIA.

Hampsoma, Swinh A M N H (6) xiv, p 443 (1894)

Type, H. pulcherrima, Swinh.

Range Assam

Palpi minute and porrect, from produced to a large rounded prominence, antennæ of female with the branches short and dilated at extremity; mid and hind tibiæ with minute terminal pairs of spurs. Fore wing with the costa much arched towards



Fig 250 — Hampsonia pulcherrima, Q

apex; the outer margin somewhat excised; veins 2 and 3 at even distances before end of cell, the latter curved; 4, 5 stalked and much curved; 6 from upper angle, 7, 8 stalked from 9, 10, 11 from long before end of cell. Hind wing with veins 2 and 3 at even distances before angle of cell and much curved; 4, 5 stalked and curved, 6, 7 from upper angle, 8 connected with 7 by an oblique bar, a veinlet in cell of each wing.

- 585 a. Hampsonia pulcherrima, Swinh A M N. H (6) kiv, p 443, id Trans Ent Soc 1895, pl 1, fig 9
- Q. Head, thorax, and abdomen very dark metallic blue Fore wing black, the base bluish, a golden-yellow subbasal band from costa to vein 1 b, an obscure oblique grey antemedial band from costa to vein 1 b, a large yellow spot in end of cell and spot in interno-median interspace below the end; the interspaces of outer area suffused with grey, a large postmedial yellow spot above vein 3 and submarginal spot above vein 4. Hind wing black, a golden-yellow fascia in base of cell, continued to apex as a broad scarlet fascia, a golden-yellow fascia on inner area to beyond middle, with four large lumilate scarlet patches between it and apex.

Hab. Khásis Exp 60 millim.

586. Campylotes histrionicus, Westw Insert Campylotes excelsa, Oberth Et Ent xx, p 54, pl x, f. 178 The form excelsa, from 16,000 ft in Sikhim, differs from altissima in the fore wing having the yellow markings obsolescent, the spots in and above end of cell hyaline, also the spot beyond end of cell above vein 5 and the submarginal lumilate spot between veins 3 and 4, the marking of hind wing hyaline, with hardly a trace of colour.

590 a. Isbarta cyanescens, Hmpsn Trans Ent Soc 1895, p 284.

d. Head and thorax metallic blue, slightly marked with white; abdomen ringed with white. Fore wing with the basal half grey, with metallic blue streaks on the veins and black streaks in and below cell, the outer half black, with two whitish spots in cell, five beyond the cell followed by a spot above vein 6 and a submarginal series. Hind wing yellowish white, the cell and interspaces below slightly suffused with blue, the apical area black, with some whitish spots on its inner edge. Underside of fore wing with the veins and margins suffused with metallic blue, the white spots prominent; hind wing chrome-yellow; the costa white and black; the apical area black suffused with metallic blue, and with whitish spots on its inner edge.

Hab. Tenasserim. Exp 62 millim.

601 a Philopator rotunda, n sp

Differs from basimaculata in the wings being much shorter and rounder. Fore wing with the streaks of outer area broader and filling almost the whole interspaces. Hind wing with hardly a trace of the mark in the cell, the streaks of outer area rather more developed.

Hab. Sikhim, Khásis; Nágas, Manipur Esp, 6 40, 2 48

millim. Types in coll Elwes and B. M.

Vol. I, p. 283 Chelura being preoccupied, substitute Genus Achelura, Kirby, Cat. Lep. Het. p. 56 (1892)

610 a. Alophogaster serraticornis, n. sp.

J. Antennæ with roughly scaled serrations. Antennæ black, with the tips white, head, thorax, and abdomen scarlet, the las with black dorsal bands. Fore wing scarlet, with a large semi-circular black apical patch. Hind wing hyaline, the veins black; the outer margin suffused with fuscous, some scarlet hairs on inner area

Hab. Khásis Eap 30 millim. Types in coll. Elwes and B. M.

Vol. I, p 289 Family NEOCASTNIIDÆ.

Differs from the Castnudæ (Vol I, p. 10) in the proboscis being absent. Both wings with vein 1 c absent, the cell open, and no veinlets in the cell.

Genus NEOCASTNIA.

Neocastma, Hmpsn Trans Ent Soc 1895, p 285

Type, N niceviller, Hmpsn.

Range Tenasserim; Palawan; Borneo

Proboscis absent, palpi with the 2nd joint very slender, long, curved obliquely upwards and reaching far above vertex of head, the 3rd short, antennæ gradually thickening into an elongate club

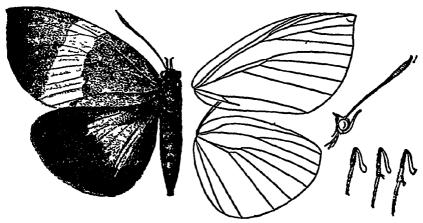


Fig 251 -Neocastnia nicevilles, J. 1

tapering to a point at apex, tibes and tarsi very thickly set with spines; mid and hind tibes with minute terminal pairs of spirs. Fore wing broad, the costa arched at base and towards apex, which is acute, the outer margin rounded; the inner margin lobed before middle, vein $1\,a$ joined by a spir given off from $1\,b$; $1\,c$ absent; 2 and 3 at even distances before end of cell, 4,5 from

a point; the cell open; 7,8 on a long stalk from 6, 9,10 on a long stalk from 11 Hind wing with the costa arched near base; the apex rectangular; the outer margin rounded; two internal veins; veins 2 and 3 shortly stalked from the median nervure, 4,5 from a point; the cell open, 6,7 from a point, 8 running along the subcostal nervure for a short distance, then suddenly arched.

- 615 a. Neocastnia nicevillei, Hmpsn, Trans. Ent Soc. 1895, p 286.
- Q. Head and thorax golden rufous, the vertex of head metallic blue-green; abdomen black, suffused with metallic peacock-blue above. Fore wing golden rufous, with a broad creamy-white band from costs just beyond middle to outer angle, with sinuous inner edge bent outwards just above inner margin. Hind wing black, the area from beyond and in end of cell to anal angle and base of inner margin brilliant metallic peacock-blue with deep cerulean blue shot round its edges. Underside of thorax and legs orangefulyous, the basal half of each wing shot with metallic blue, forewing with a fullyous subapical spot.

Hab. Tenasserim. Exp. 90 millim

PSYCHIDÆ.

- 630 a. Acanthopsyche (Metisa) canifrons, Hmpsn. Trans. Ent. Soc. 1895, p. 286
- J. Uniform dark fuscous; the frons hoary. Fore wing with veins 7, 8, 9 stalked.

Hab. Sikhim. Exp. 20 millim.

- 631 a. Acanthopsyche (Metisa) hypoleuca, n. sp.
- 3. Pale brown. Fore wing with a slight greyish tange; the costa dark. Hind wing with the apex whitish, cilia of both wings fuscous. Underside of hind wing white.

 Hab. Ceylon (Green). Exp. 22 millim. Type in B M.
- 638 a. Psyche (Eurycyttarus) melanostola, n sp
- d. Head, thorax, and abdomen clothed with black hair. Wings reddish brown, the veins and margins darker.
 Hab. Khásis. Eup. 20 millim. Types in coll. Elwes and B. M.
- 645 a Mahasena grammiyora, Hmpsn Trans Ent Soc. 1895, p. 286
- J. Differs from hockings in the apex of fore wing being rectangular and not produced; the outer margin erect instead of oblique.

The larva is destructive to thatching grass, and forms a rough case of large pieces of the grass longitudinally disposed.

Hab. Calcutta. Exp. 30 millim.

- Vol. I, p 303. Diabasis being preoccupied, read Genus Stichobasis, Kirby, Cat Lep. Het p. 519 (1892).
- 650. Aprata mackwoodi, Moore, belongs to the *Tunesda*; veins 9, 10, not 8, 9, of fore wing are stalked.

COSSIDÆ.

- 651 a. Cossus fuscibasis, Hmpsn. Trans. Ent Soc 1895, p. 287
- Q. Head, thorax, and abdomen dark brown, the last greyish towards extremity. Fore wing with the basal two-thirds brown, irrorated with fuscous; a paler patch between median nervure and vein 1, bounded by an irregular black postmedial line, highly angled at vein 4 and sending a streak inwards above vein 1; the outer area grey, striated and reticulated with black. Hind wing with the basal half fuscous, the outer area grey, striated and reticulated with fuscous

Hab. N. Khyen Hills, Burma Exp 50 millim

- 656. Cossus stigmaticus Transfer to Azygophleps. Hind tibiæ with a minute terminal pair of spurs.
- 665 a. Azygophleps nurella, Swinh. A. M. N. H. (6) xiv, p. 440, id Trans Ent. Soc 1895, pl 1, fig 16
- d. Fawn colour, frons fuscous, head reddish brown Fore wing with the costal area silvery fuscous; the area in and below cell with a reddish tinge Hind wing paler

 Hab Khásis. Exp. 52 millim.

ARBELIDÆ

Under 675 Arbela tetraonis insert (syn.) Arbela phaga, Swinh. A. M. N. H. (6) xiv, p. 440, and Trans. Ent. Soc. 1895, pl. 1, fig. 2. Male with fuscous hind wings. Khásis.

HEPIALIDÆ

- 679 a. Palpifer cærulescens, Swinh A M. N H (6) xiv, p. 440
- of. Head and thorax dark brown, abdomen fuscous. Fore wing with a round sexual patch at base of vein 1, dark purplish brown, an ochreous spot in cell; traces of three curved maculate

dark bands: submarginal and marginal series of ochreous specks curved and running to the base. Hind wing fuscous shot with brilliant metallic blue, an ochreous patch on outer margin below apex. Underside shot with blue

Hab. Khásis. Exp 26 millim.

679 b. Palpifer minutus, n sp

Palpi porrect and almost straight. Head and thorax yellow-brown; abdomen fuscous. Fore wing yellow-brown, irrorated with dark brown; ante- and postmedial black and white spots on vein 1, an oblique series of five black and white spots from apex, with a marginal series below them round the outer angle to near middle of inner margin. Hind wing fuscous, the cilia yellow-brown.

Hab. Khásis. Exp. 18 millim. Type in B. M.

CALLIDULIDÆ.

Vol. I, p. 325. Transfer Herimba to the Thyrididæ near Hyperthyris.

DREPANULIDÆ.

Vol. I, p. 327. The genera Deroca, Drapetodes, and Cilix have the frenulum present, very slender in the male and hardly visible in the female

698 a. Euchera orciferaria, Wik Cat. xx, p 56.

Dark purplish brown; wings with some indistinct waved grey lines on basal area, a broad postmedial band of blue-grey suffusion with indistinct waved grey lines on it and waved outer edge. Fore wing with a fulvous spot on discocellulars, a submarginal blue-grey band from below apex expanding into a diffused patch at middle; a marginal line. Hind wing with blue-grey patch and marginal line at apex; an oblique blue-grey line from vein 2 to anal angle

Hab. N. China, Tenasserim. Exp 80 millim.

707 a. Leucodrepana nudobia, Swinh A M N. H. (6) xiv, p 485 ed. Trans. Ent Soc 1895, pl 1, fig 17.

Fore wing with vein 6 from angle of cell.

Dull yellowish brown. Fore wing with a black speck at each angle of cell; an ill-defined darker oblique postmedial band from below apex, with an obscure line beyond it which reaches apex;

a marginal darker band widening to inner margin, Hind wing with antemedial orange-yellow band widening to costa, traces of postmedial and submarginal lines Underside pale.

Hab. Khásis Exp. 32 millim.

Genus EMODESA

Emodesa, Moore, Lep. Ath p 255 (1888)

Type, E sinuosa, Moore

Range Khásis, Burma, Borneo

Palpi porrect, slender, and reaching just beyond the frons, proboscis present, antennæ with uniseriate branches, hind tibiæ with one pair of spurs. Fore wing with the apex produced and acute; vein 6 from angle of cell, 7 and 11 from end of areole. Hind wing with the fremulum absent; the outer maigin somewhat angled at vein 4, 6 and 7 separating very near the base

707 b. Emodesa sinuosa, Moore, Lep Ath p 256, pl. 8, fig. 18 C & S no 4004.

d White, palpi blackish, abdomen fuscous except the basal



Fig 252 — Emodesa sinuosa, d

segment Fore wing with patches of fuscous on costa; traces of three waved antemedial lines; two postmedial waved lines most prominent on disk; indistinct waved submarginal and almost marginal lines Hind wing with waved antemedial, two medial, submarginal, and almost marginal lines

Hab Khásis; Tenasserim, Borneo Exp. 24 millim.

Vol. I, p 333 Under Drepana insert *Thaleridia*, Moore, Lep Atk p 266 (1888), and, for Sect III, *Tridrepana*, Swinh Trans Ent. Soc 1895, p 3.

711 a Drepana mecasa, Swith A M N H (6) xiv, p 484

Antennæ of male with long uniseriate branches.

Grey-brown, shafts of antennæ white, abdomen of male with a white dorsal band at middle. Fore wing with a black speck at each angle of cell, a diffused fuscous band from apex to middle of inner margin with indistinct lines on it, an indistinct submarginal series of specks and marginal band. Hind wing with three indistinct antemedial lines; a medial ochreous band with black specks on it at the two angles of cell, and bounded by three postmedial lines; an indistinct submarginal series of specks and marginal band

Hab. Khásis Exp 38-42 millim.

- 712. Insert (syn.) Thaleridia pruinosa, Moore, Lep. Atk. p. 267; C & S. no. 3752
- 724 a. Drepana leucosticta, Hmpsn Trans. Ent. Soc. 1895, p 287;
 Swinh Trans Ent Soc 1895, p. 3.
- o. Dark purplish grey. Fore wing with a white postmedial line highly angled below the costa and running into a large white apical patch, the veins between it and the cell streaked with white; slender submarginal and marginal white lines. Hind wing with two medial white lines and two indistinct fine white lines close to the margin. Underside paler, with white apical patch to fore wing

Hab. Sikhim; Khásis. Ewp. 28 millim.

739. Insert (syn.) Albara erpma, Swinh. A. M. N. H. (6) xiv, p. 433.

Genus PROBLEPSIDIS.

Problepsidis, Himpsn. Trans Ent. Soc 1895, p. 287

Type, P. argyrialis, Hmpsn

Range Sikhim; Nágas; Tenasserim.

Proboscis present; palpi minute, hind tabise with two pairs of spurs. Fore wing with the apex falcate; the outer margin angled at vein 4, vein 11 from the arcole. Hind wing with the fremulum present, the outer margin slightly angled at vein 4.

- SECT. I. Fore wing with vein 6 from the areole, 10 from beyond it
- A. Antennæ of male fasciculate, hind wing with the inner margin not excised.
- 741 a. Problepsidis argyrialis, Hmpsn. Trans Ent Soc. 1895, p. 287.
- d. Head, thorax, abdomen, and fore wing black-brown, the last with a few bluish silvery scales, traces of a waved double antemedial line and speck at end of cell; a postmedial line excurved beyond cell, with a brown band on its outer edge, followed by an irregular white band; a blue-grey irregularly dentate marginal band. Hind wing with the basal half fuscous; antemedial and medial lines represented by double angulate marks on inner margin, a broad postmedial white band, a somewhat maculate marginal fuscous-grey band.

Hab. Nágas. Exp. 22 millim.

- B. Antennæ of female bepectinate with short branches, hind wing with the inner margin excised towards and angle.
- 741 b Problepsidis albidescens, Hmpsn Trans Ent Soc. 1895, p 288
 - 2. Greyish white. Fore wing with black speck at end of cell,

a postmedial black spot on costa, an oblique fine waved line from

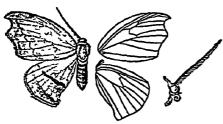


Fig 253 —Problepsidis albidescens, ♀

apex to inner margin beyond middle, with a black subapical mark on it, the marginal area browner, with indistinct submarginal and marginal brown lines Hind wing with traces of oblique subbasal line a postmedial black band obsolescent towards costa, a diffused

submarginal line and fine marginal line. Underside with the costal half of fore wing suffused with fuscous, both wings with the veins brown, a broad blackish postmedial band and waved submarginal line sinuous towards costa of fore wing

Hab. Sikhim Exp. 42 millim

SECT II. Fore wing with vein 6 from upper angle of cell, 10 from end of areole

741 c Problepsidis cupreogrisea, Hmpsn Trans Ent Soc. 1895, p 288

Q Leaden grey with a slight coppery tinge. Fore wing with a dark ferruginous basal patch in and below cell, extending along median nervure to the angle of cell, two minute white specks on discocellulars, the apex orange, with a black spot on it, an oblique line from below apex to middle of inner margin, a dark ferruginous marginal band traversed by a fine white curved submarginal line and fine orange marginal line. Hind wing with medial and marginal broad ferruginous bands, the latter traversed by fine pale submarginal and marginal lines.

Hab Tenasserim Exp. 25 millim

Genus STREPTOPERAS.

Streptoperas, Hmpsn Trans Ent Soc 1895, p 289

Type, S luteatum, Hmpsn

Range Bengal

Palpi slender, upturned, and hardly reaching vertex of head, proboscis present; antennæ of female thickened and flattened; frenulum present. Fore wing with the apex produced, recurved, and lying against outer margin; vein 3 from before angle of cell; 6 from above middle of discocellulars, 7, 8, 9 stalked and anastomosing with 10, which is given off from 11 to form the areole. Hind wing with the outer margin straight from apex to vein 3, where it is produced to a point, then excised to anal angle, veins 3, 4, 5 from close to angle of cell

741 d. Streptoperas luteatum, Hmpsn. Trans Ent. Soc 1895, p. 289.

2. Yellow, suffused and irrorated with red-brown. Fore wing with indistinct antenedial line highly angled in the cell, two



Fig 254—Streptoperas luteatum, 2

specks at end of cell, the inner medial area yellower and crossed by numerous very indistinct waved rufous lines, an indistinct waved submarginal line, some white submarginal specks. Hind wing with the subbasal area yellow, crossed by waved rufous lines; a

black speck at end of cell, a double postmedial line, the area beyond it yellow, crossed by waved rufous lines, a more distinct submarginal waved line, and rufous marginal band from vein 3 to anal angle

Hab N E Bengal Exp. 44 millim

747 a. Phalacra edentata, n. sp.

2. Both wings with the outer margins excised below apex; fore wing with the outer margin angled at vein 4, the arcole

very long, with vein 11 given off near its extremity

Pale ochreous brown, irrorated with fuscous scales. Forewing with fuscous spot below lower angle of cell, indistinct postmedial and submarginal series of dark specks and a marginal series of dark strie. Hind wing with oblique antemedial dark line, a dark speck at each angle of cell; indistinct postmedial and submarginal series of dark specks and some marginal specks.

Hab Ceylon (Pole). Evp 26 millim Type in B M

Genus PHALACROPSIS.

Phalacropsis, Swinh. Trans Ent Soc 1895, p 5

Type, P. carnosa, Swinh.

Range Khasis.

Differs from Phalacra in the outer margin of fore wing being slightly excised and crenulate from apex to vein 3, then very oblique, vein 10 given off from 11 and anastomosing with 8, 9 to form the areole. Hind wing with the costs evenly arched to the point at vein 6; 7 becoming coincident with 8.

- 747 b. Phalacropsis carnosa, Sunth Trans Ent Soc 1895, p. 5, pl. 1, fig 5
 - o. Fleshy grey Fore wing with traces of numerous waved

dark lines, an ochreous fascia in end of cell, a black speck near



Fig 255
Phalacropsis carnosa, & 1.

the end and fuscous mark at upper angle; a postmedial series of black specks, excurved from vein 3 to 5, with obscure ochreous and rufous band beyond them, chia ochreous and fuscous Hind wing redder, a prominent black cell-speck; the

waved lines before the postmedial series of specks more prominent, an indistinct sinuous submarginal line

Hab. Khásis Exp 30 millim.

748 a Drapetodes croceago, Hmpsn Trans Ent Soc. 1895, p 290

d. Bright orange-yellow, head, thorax, and abdomen marked with orange Fore wing with the veins orange; four slightly waved orange lines before the middle, the disk clouded with fuscous, two black spots at end of cell, two postmedial curved orange lines and two dentate submarginal lines. Hind wing with the disk slightly clouded with fuscous; a black speck at end of cell; medial, postmedial, and two crenulate submarginal lines Underside pale.

Hab Tenasserim. Exp. 30 millim.

759 a. Oreta hyalodisca, n sp

of Head, thorax, and abdomen red-brown and chestnut. Fore wing red-brown, variegated with yellow-brown on apical area; a large very irregular hyaline yellow patch in and below end of cell and on disk, running out to a point between veins 4, 5, and with a small spot at its inner edge, an oblique dark submarginal line; an oblique shade from apex; some yellow spots on margin, and some black suffusion near the angle. Hind wing chestnut, slightly variegated with yellow-brown; a medial dark line, with a minute yellow-ringed black ocellus beyond its middle, some yellow on the margin at the angle. Underside pale

Hab Khásis Exp 34 millim Types in coll Elwes and B. M.

759 b. Oreta olga, Swinh A. M. N. H (6) xiv, p 434, id Trans Ent. Soc 1895, pl 1, fig 14

3. Reddish brown, wings striated with fuscous Fore wing with the outer margin slightly excised from apex to vein 4; traces of a curved antemedial band, a postmedial greyish line with rufous inner edge acutely angled on vein 5, and with dark suffusion between that point and the cell, then oblique and slightly sinuous to inner margin. Hind wing with the outer margin deeply excised between vein 2 and anal angle, a nearly straight grey medial line with rufous inner edge obsolescent on costal area, a diffused dark postmedial patch between veins 3

and 6 Underside yellow, with the strime prominent and some ferruginous suffusion on outer area

Hab Khásis Exp 40 millim

- 760. Oreta moorei, Dyar, Ent News, 1894, p. 227, marginata being preoccupied.
- Vol I, p. 351 Transfer Camptochilus to the Thyrididæ near Camadena

THYRIDIDÆ.

773 The two forms described as sexes are distinct species—Rhodoneura polygraphalis, Wlk Cat xxxiv, p 1240=marmoeals, Moore=denticulosa, Moore, is a pure white form, whilst
R bastialis, Wlk, is a much greyer species, thickly striated with
brown-pink; the range of the latter is from W. and S. Africa
to India and Ceylon, of the former from India and Ceylon to
N Australia and the Solomons

773 b Rhodoneura argentalis, Wlk Cat xxxiv, p 1522
Siculodes argentalis, var tuberosalis, Warr A M N H (6)
xvii, p 212

White; the head and collar bronze, wings slightly striated with bronze. Fore wing with the basal area suffused with bronze, its outer edge oblique, a large oval postmedial bronze patch between veins 7 and 1, a subapical black and white ocellus with a yellow lunule on its upper edge; the apical area with prominent striæ. Hind wing with a dark speck at apex and another above anal angle, submarginal and marginal series of bronze stræ. Underside of fore wing with golden metallic scales along subcostal nervure and nervules

Hab Bhután, Khásis, Ceylon, Java. Exp 26 millim.

779 Insert (syn) Pharambara obliquistrigalis, Warr A. M. N. H. (6) xvn, p. 210.

780 a Rhodoneura atristrigulalis, n. sp

d Ferruginous, collar browner, wings thickly striated with ferruginous Fore wing with the base darker, an ill-defined outwardly-oblique medial line; a cupreous-brown patch beyond cell conjoined by a band to costa and by double lines to inner margin; an irregular line ending at outer angle and connected by spurs with the discal patch and outer margin, a line across apical area forking towards costa. Hind wing with subbasal line, a discocellular spot with reticulated lines between it and inner margin, a submarginal line connected by spurs with outer margin and the medial lines. Underside of fore wing with black and white streaks in cell and beyond upper angle.

Hab. Bhutan, 2500 feet (Dudgeon). Exp 32 millim.

- 781 a Rhodoneura hebra, Swinh A M N H (6) xv, p 18
- d. Dark chestnut variegated with grey; wings with indistinct dark reticulations and silvery-grey spots arranged in ill-defined maculate bands. Underside of fore wing with the costa striated with black; a ferruginous subcostal fascia; the cell and veins beyond it with fine black streaks, the retinaculum metallic, three ferruginous bands from cell to inner margin, and diffused ferruginous patch on middle of outer area, hind wing suffused with ferruginous

Hab Khásis. Exp 26 millim.

- 786 R vinosa=Rhodoneura tetragonata, Wlk. Journ Linn Soc. vii, p 78; which has precedence.

 Insert (syn) Rhodoneura gubralis, Swinh A. M. N. H. (6)

 xvi, p 299
- 791. Insert (syn) Rhodoneura pralanis, Swinh. A. M. N. H. (6) xyi, p. 298 Khásis
- 792 a. Rhodoneura melanostigmalis, Swinh A M N H (6) xvi, p 298
- Q. Pale ferruginous suffused with darker dull ferruginous. Fore wing reticulated with ferruginous lines, which form patches almost covering the basal area; some black quadrate spots on costa conjoined at middle to a large black spot beyond end of cell; a submarginal black speck above vein 5; a marginal series of specks Hind wing reticulated with ferruginous, and wholly suffused with dull ferruginous except at base which is pale Underside similar Hab Khásis Exp 24 millim

792 b. Rhodoneura semiperforata, Warr A M N. H (6) xv11, p 211

d. Ferruginous Fore wing elongate and narrow, with ante-medial and medial short pale bands from costa, and some specks below cell; the outer area except the costa semihyaline, with numerous ferruginous striæ; a band across apical area. Hind wing pale ferruginous with darker striæ; a subbasal band from cell to inner margin, and conjoined patches beyond the cell and below lower angle. Underside of fore wing with longitudinal short black streaks on pale costal spots; a bright ferruginous fascia below costa; black and white streaks in cell and on subcostals, and a very prominent hooked black mark beyond cell Hab. Khásis Exp 28 millim.

794 a. Rhodoneura thiastoralis, WM Cat xix, p 893 Rhodoneura rhodosticta, Swinh A M N H (6) xvi, p 298.

Dark red-brown with a purplish tinge, wings evenly striated with black. Fore wing with bright pink spots on the costa, traces of five or six dark lines. Hind wing with discocellular black speck and traces of five or six lines. Underside of fore YOL. IV.

wing with bright chestnut suffusion in, below, and beyond upper angle of cell; a streak of jet-black and brilliant metallic scales on end of median nervure; the apex chestnut Hind wing with the base chestnut.

Hab. Khásis; ? Brazil. Exp. 16 millim.

- 795 a. Rhodoneura decoratalis, Warr. A. M. N H. (6) xvn, p. 209.
- d. Head and thorax fuscous brown; abdomen paler. Fore wing with the basal half of costal area blackish, the outer half ferruginous, the costa with white specks, two beyond middle conjoined into a larger spot, the inner area whitish, the area between cell and outer margin grey, with a submarginal black spot above middle. Hind wing whitish suffused with grey, especially between the cell and apex; rufous spots at lower angle of cell and between it and inner margin, a marginal brown band. Underside of fore wing with bright ferruginous on outer half of costa, black streaks in and beyond cell; a brown band from discocellulars to inner margin; a curved brown band across apical area; oblique black stream on margin.

Hab. Khásis. Ewp. 16 millim

- 796. Insert (syn.) Pharambara parcipunctalis, Warr. A. M. N. H. (6) xyı, p. 210. Khásıs. Kop. 26 millim.
- 797 a Rhodoneura intimalis, Moore, Lep. Atk. p. 218, C. & S. no 4381

 Pharambara compunctalis, Warr. A. M. N. H. (6) xvii, p. 208.

 Pharambara ulterior, Warr. A. M. N. H. (6) xvii, p. 212.

Very pale rufous irrorated with fuscous Fore wing in the form ulterior with indistinct antemedial, medial, and postmedial bands of quadrate spots; a darker spot beyond discocellulars almost touching a triangular patch on the costa; the apical area suffused with fuscous; an inverted V-shaped mark above middle of outer area; two dark marginal specks above outer angle. Hind wing with the base dark; a prominent dark medial band and band from vein 8 to anal angle. Underside with the markings more prominent and rufous; fore wing with four triangular costal spots; antemedial, medial, and postmedial bands of obliquely placed quadrate patches, the medial conjoined to a dark-centred discocellular spot, the postmedial to the inverted V; hind wing with black-centred discocellular spot and medial and postmedial bands.

The rarer form *entimals* has the dark markings and bands of upper and under sides very much reduced or almost absent.

Hab. Khásis; Calcutta; Ceylon; Java. Exp. 16 millim.

- 798 a. Rhodoneura setifera, Swinh. A. M. N. H. (6) xv1, p. 298.
- 3. Mid tabus fringed on onter side with spinous hair; hind tibus with a brush of long hair from base. Head, thorax, and abdomen dark red-brown suffused with grey; wings pale red-

brown, thickly suffused and reticulated with dark red-brown and irrorated with grey, an oblique dark brown band from below costs of fore wing, narrowing to middle of inner margin of hind wing. Underside suffused with glistening grey, the reticulations more prominent, the band only developed on fore wing and with a less prominent band before it

Hab Khásis Exp 22 millim

D Wings long, the apex produced, hind wing with the outer margin straight

800 a Rhodoneura tritropha, Swinh A. M. N. H (6) xv, p 17

of Ferruginous, head and metathorax dark brown Fore wing with faint dark reticulations, the costa pale, with minute black specks. Hind wing with oblique black subbasal band; an oblique chestnut postmedial band, with grey band on its outer edge expanding to anal angle, where there is a large deep black spot; the margin chestnut; both wings with dark speck near middle of inner margin, and fore wing with a dark streak before middle. Underside of fore wing with bright chestnut antemedial and subapical patches, dark chestnut patches surrounded with grey in and beyond end of cell, and two bands from cell to above inner margin, a marginal white band irrorated with fuscous from below apex to vein 5, hind wing with chestnut fascia on costa followed by two spots, a dark subbasal band from cell to inner margin; a postmedial dark band on whitish suffusion; the margin dark, and a black spot at anal angle.

Hab Khásis Exp. 32 millim.

802 Hypolamprus striatalis, omit Pharambara intimalis, Moore (see 797 a)

804 a. Hypolamprus fimbriatus, Warr A M.N H (6) xv11, p 207

Follows yellow; collar red-brown with a leaden tinge; wings with dark strie. Fore wing with a leaden tinge on costal area, the apical part redder, a hoop-shaped dark mark from discocellulars to inner margin beyond middle and outer angle; a prominent dark line across apical area forking below costa, the outer branch curving round and becoming the marginal line. Hind wing with subbasal, medial, irregular postmedial, and a prominent marginal line. Underside of fore wing with ferruginous in cell and below costa, black streaks on subcostal nervure and nervules and white subapical spot.

Hab Sikhim, Khásis. Exp. 24 millim.

804 b. Hypolamprus stylophorus, Swinh A. M. N. H (6) xv, p. 17

Head, thorax, and abdomen bright or dark red-brown; wings with the basal two-thirds bright or dark red-brown. Fore wing with medial and postmedial dark bands from cell to inner margin

on the dark area. Hind wing with the dark area terminating just beyond the middle and with rounded outer edge. Underside of fore wing with some brilliant metallic scales in and beyond the cell

Hab. Khásis; Ceylon. Exp. 18 millim.

812 Insért (syn.) Eutelia siccifolia, Moore, P. Z S 1881, p. 375, C. & S. no. 2206.

LIMACODIDÆ.

822 a. Macroplectra semiaurantia, n sp

Antennæ of male very much thickened and flattened.

Head and thorax orange irrorated with brown, abdomen dark brown. Fore wing with the basal half fiery orange suffused towards costa with brown, with a minutely dentate dark antemedial line from cell to inner margin, its outer edge minutely dentate; the marginal area suffused with orange, forming an ill-defined patch on costa. Hind wing dark brown.

Hab. Khass. Emp 20 millim. Types in coll Elwes and B.M.

858 a. Miresa canescens, n sp

d Head, thorax, and abdomen bright rufous Fore wing silvery grey with a slight rufous tinge, and irrerated with black scales, an ill-defined rufous line from costa towards apex to inner margin before middle, an ill-defined curved submarginal rufous line from costa to vein 3, costa and cula rufous Hind wing very pale yellow, the cula rufous

Hab Ceylon (Green) Exp. 32 millim. Type in B M.

Genus MICROLIMAX, nov

Type, M. pallidipuncta, Hmpsn

Range Ceylon

Palpi minute and porrect; antennæ of male bipectanate, with long branches diminishing to apex. Fore wing short and very broad, the apex rounded; all the veins from cell, vein 8 running



to apex. Hind wing with all the veins from cell, 8 anastomosing with the cell near base, tibiæ without spurs.

858 b. Microlimax pallidipuncta, n. sp.

Fig 256 — Microlimax pallidipuncta, & § d. Dark brown suffused with grey. Fore wing irrorated with bright grey scales and mottled with

grey; a white band between veins 2 and 1 just beyond the middle.

Hab. Hambantota, Ceylon (Pols). Exp. 10 millim. Type in

869 should stand as Parasa hampsoni, Dyar, Ent. News, 1894 p 227; viridis being preoccupied

870 α. Parasa chlorozonata, n. sp.

of Bufous; vertex of head and thorax bright green. Fore wing with medial green band from subcostals to inner margin, contracted at median nervure. Hind wing with the basal two-thirds yellowish white, the outer third pale rufous.

Hab. Ceylon (Pole). Exp. 24 millim. Type in B. M.

878 a. Ceratonema ferrugineum, n sp.

d. Rufous, head yellow-brown. Fore wing glossy, with a diffused curved postmedial band of grey scales extremely ill-defined and diffused to outer margin below apex. Hind wing fuscous brown with a grey gloss.

Hab Khasis Exp 24 millim Type in coll. Elwes.

879 a Ceratonema rufibasale, n sp

c. Head ochreous, thorax and abdomen bright rufous Fore wing with the basal half bright rufous, bounded from lower angle of cell to inner margin by a silvery-white line slightly angled on veins 3 and 1c, outer area brown, paler towards margin. Hind wing brown with a yellowish gloss.

Hab Khasis. Exp. 20 millim. Types in coll Elives and B M.

880 a Ceratonema pallidinota, Hmpsn. Trans Ent. Soc 1895, p. 290

d Head, thorax, and fore wing dark red-brown with slight purplish suffusion, abdomen, hind wing, and underside paler; hind tibiæ with thick tufts of dark purplish hair. Fore wing with a large pale patch beyond upper angle of cell and a redder patch on outer half of inner area

Hab Sikhim Exp 22 millim.

- 888 Insert (syn) Altha rufescens, Swinh. A. M. N. H. (6) xu, p. 211; proposed for the specimen from Ceylon described in text.
- 891 a. Narosa uniformis, Swinh. Trans Ent. Soc 1895, p 7.
- 2. Antennæ minutely serrate Uniform pale rufous; the thorax and fore wing with slight white suffusion, the latter with an oblique series of postmedial dark specks on the veins, terminating as dark tips to the scales of the tuft at middle of inner margin. Hind wing with the cilia dark near anal angle.

Hab. Khásis. Exp. 34 millim.

- 892 a. Narosa argentipuncta, Hmpsn. Trans. Ent. Soc. 1895, p. 290
- d. White tinged with fulyous. Fore wing with a tuft of fulyous scales at base; some diffused fulyous along subcostal

nervure and at end of cell; an oblique diffused fulvous fascia from costa beyond middle to outer margin below apex; a silvery-white spot at lower angle of cell, some dark specks on the margin *Hab*. Ceylon. *Exp*. 28 millim.

892 b. Narosa erminea, Hmpsn. Trans Ent Soc. 1895, p 291.

d. White; abdomen slightly tinged with fuscous. Fore wing with a large fuscous patch on disk, with dark specks on its outer edge, conjoined to a fulvous and fuscous apical patch and to a large fuscous medial patch on inner area, with dark marks on it and a fulvous spot on its outer edge. Hind wing slightly tinged with fuscous.

Hab. Thayetmyo, Burma. Exp. 18 millim.

Genus MONEMA

Monema, Wik Cat v, p. 1112 (1855)

Type, M flavescens, Wlk., from Japan and China. Range. Japan; China, Bhután.



Fig 257 — Monema coralina, 5

Palpi upturned far in front of frons, the 2nd joint reaching above vertex of head and somewhat smoothly scaled, the 3rd long, antenna of male simple, tabus and tarsi hairy, the spurs well developed. Fore wing with the apex produced upwards; veins 7, 8, 9, 10 stalked;

11 curved and running close along 12. Hind wing with veins 6, 7 stalked.

- 893 a. Monema coralina, Dudgeon, Hmpsn Trans. Ent Soc 1895, p. 290
- J. Head, thorax, and abdomen yellowish white; palpi black-brown; thorax below and legs dark red-brown. Fore wing with the basal half yellowish white, a brown spot on inner area before middle, the outer half suffused with delicate pink; very indistinct oblique pink postmedial and submarginal lines, obsolete towards apex and inner margin. Hind wing with the inner half of wing suffused with delicate pink. Underside pink.

Hab, Bhután. Exp. 34 milim.

LASIOCAMPIDÆ

911 a Metanastria rubra, n. sp

o. Dark pinkish red-brown; palpi black; vertex of head and thorax ochreous, shaft of antennæ marked with black. Fore wing irrorated with ochreous scales, a triangular blackish shade from

near base of median nervure to outer margin at apex and outer angle, leaving the costal and inner areas and vein 5 red, ill-defined ochreous ante- and postmedial bands almost obsolete, except on costal and inner areas, an obscure dark discocellular spot. Hind wing more brick-red, with the margin dark.

Hab. Khásis. Exp. 74 millim. Type in B. M.

Genus ODONTOCRASPIS

Odontocraspis, Swinh A M. N H (6) xiv, p 439 (1894)

Type, O hasora, Swinh.

Range Khásis.

Differs from Bharetta in the antennæ being shorter; the mid and hind tibiæ without spurs Fore wing with the outer margin produced to a hook at vein 6 and slight points at the other veins,



Fig 258 — Odontocraspis hasora, & 1

and excised below the apex and the hook Hind wing much longer, the costs very highly arched, the outer margin crenulate

- 925 a. Odontocraspis hasora, Swinh A. M. N H. (6) xiv, p. 439; id Trans Ent Soc. 1895, pl. i, fig 11
- d. Dark red-brown. Fore wing with fiery orange specks and spot in end of cell, two ochreous specks at end and spots beyond the end, some black suffusion below the costa towards apex; a quadrate subapical hyaline speck with triangular spot below it. Hind wing with the costal area reddish, underside with a broad postmedial bluish-white band with diffused black edges

Hab. Khásis Exp. 46 millim.

- 940 a. Lenodora pallidochrea, n sp
- d. Pale ochreous brown. Fore wing with two obscure fuscous discocellular specks; a curved pale rufous line from just below apex to middle of inner margin, with a curved fuscous highly dentate line beyond it, appearing as a double series of specks on the veins Hind wing whitish.

Hab. Khásis Evp 44 millim Type in coll. Elwes.

949. Odonestis lineata Insert (syn) Metanastria fuscomarginata Swinh Trans Ent Soc 1895, p 27, pl 1 fig. 7, and transfer to Metanastria, Sect III

LYMANTRIIDÆ.

- 960 a. Orgyla nucula, Swinh A M N. H (6) xiv, p 435, id Trans Ent Soc 1895, pl 1, fig. 15
- Fulvous brown irrorated with black. Forewing with traces of subbasal pale line, with a bright chestnut patch beyond it below the cell, bounded by the antemedial pale line which is angled in the cell; a minutely crenulate double postmedial line angled inwards below vein 2 and with bright chestnut patches beyond it in the interspaces, some black and white suffusion at apex. Hind wing fuscous black, with the cilia ochreous. Abdomen with the dorsal tufts very large.

Hab. Khásis; Shan States Emp 26 millim.

- 980. Lælia umbrina A race from Simla is yellowish brown with the spots obsolete, and a race from Travancore is yellowish brown. female ochreous.
- 983 Omit Ptilomacra juvenis, Wik.
- 983 a. Lælia juvenis, Wik Cat v, p 1099, C & S no 1836
- d. Differs from testacea in being browner and without rufous tings. Fore wing considerably longer and more produced at apex, a dark fascia below median nervire from base to vein 4, and another on inner margin, no blackish subapical patch. Hind wing fuscous

Hab Ceylon Exp. 42 millim

992. Insert (syn) Pantana luterceps, Swinh. A. M. N. H. (6) xvii, p. 361

Genus MALACHITIS

Malachrus, Hmpsn Trans Ent Soc 1895, p 291

Type, M melanochlora, Hmpsn. Range Bhután



Fig 259.

Malachitis melanochlora, 6

Palpi porrect, reaching just beyond the frons, antennæ of male strongly bipectinated. Fore wing with the apex produced and outer margin oblique, vein 9 given off from 10 and anastomosing with 7 and 8 to form the areole. Hind wing with the inner margin long; veins 3, 4 stalked, 5 from lower angle of cell, 6, 7 stalked.

996 a. Malachitis melanochlora, Hmpsn Trans Ent Soc 1895, p. 291.

o. Black-brown; head and thorax slightly variegated with green. Fore wing with a basal green patch, a green streak on base of inner margin, and a green fascia beyond upper angle of cell. Hind wing browner.

Hab. Bhután. Exp. 36 millim.

- 1000 a. Dasychira postfusca, Swinh Trans Ent Soc 1895, p 9, pl i, fig. 12
- 3. White, antennæ with the branches rufous; abdomen suffused with fulvous above Fore wing irrorated with fuscous, an irregular dark-edged antemedial spot on costa, an incurved irregularly dentate medial line, a more prominent dentate postmedial line, oblique from costa to vein 6, where it is highly angled, then incurved, an irregularly dentate submarginal line Hind wing fuscous Underside suffused with fuscous, hind wing with cell-spot and curved postmedial line

Hab Khásis. Exp 46 millim

- 1005. Stauropus (Dasychira) perdix=268. Stauropus fasciatus, and has priority.
- 1014 a Dasychira orimba, Swinh A M N H. (6) xiv, p 435
- Junform olive-brown. Fore wing with a patch of ochreous and black scales at base below median nervure, an obscure large reniform stigma, a postmedial dentate line bent outwards from costa to vein 6, then inwardly oblique and reaching inner margin before middle, two obscure dentate marks beyond it below costa and an indistinct dentate submarginal line. Hind wing fuscous

Q with the head and thorax greyer, the fore wing browner; the postmedial line very highly and irregularly dentate, with another similar but more diffused line beyond it from apex conjoined to it towards inner margin.

Hab Khásis Exp, & 36, ♀ 48 millim.

1014 b Dasychira angulata, Hmpsn Trans Ent Soc 1895, p 292.

Fore wing with the outer margin excised below apex and angled at vein 4

J. Brownish grey irrorated with brown Fore wing with three black specks on discocellulars and a marginal series, abdomen and inner margin of hind wing suffused with fuscous; a dark lunule at end of cell and marginal series of ill-defined dark specks. Underside white, with lunules at end of cell of each wing and a marginal series of black specks, hind wing with some dark postmedial marks.

Hab Sikhim. Exp. 46 millim.

1018 a. Mardara ruficeps, n sp.

2 Fuscous brown; head and collar rufous, anal tuft greyish. Fore wing with indistinct pale antemedial line, a dark discocellular speck, a crenulate pale postmedial line slightly bent outwards at vein 5, the marginal area and cilia of both wings tinged with yellow.

Hab. Rhutén, 2500 feet (Dudgern) Fam. 30 million. Time in

Hab Bhután, 2500 feet (Dudgeon) Exp 30 millim Type in B M

1022 Insert (syn) Cyclidia decolorata, Wlk Char Undescr. Het p 96, C & S no 3121

Q. Very much paler, the postmedial line of fore wing some-

times prominent and continued to costa; the apex sometimes suffused with fuscous Hind wing whitish. Exp. 82 millim

- 1041 a Lymantria plumbalis, Hmpsn Trans Ent Soc. 1895, p 292
- of. Head, thorax, and fore wing leaden grey; thorax spotted with black; fore femora crimson, abdomen crimson, with a dorsal series of black spots and black anal tuft. Fore wing with indistinct lumilate subbasal and antemedial lines, two medial lines which become coincident at median nervure, postmedial and submarginal lines arising from black spots on the costa, a black lumile at end of cell, a marginal series of black spots. Hind wing dark fuscous; clia of both wings white except at apex

Hab Tilin Yaw, Burma Exp 60 millim

- 1051 a. Topomesa discolor, n sp.
- d Differs from submans in being very pale reddish ochreous, the thorax and base of fore wing suffused with white, the latter irrorated with silvery scales, the costa rufous, a diffused dark mark on upper discoccilulars instead of the spot beyond lower angle of cell, the outer margin much more excised below apex and angled at vein 4.

Hab Ceylon (Pole) Exp 36 millim Type in B M

The genus has vein 10 arising free, then slightly anastomosing with 7, 8, 9, not stalked with them.

1052 a Dactylorhyncha luterfascia, Hmpsn Trans Ent Soc 1895, p 292

Palpi not reaching far beyond the frons

d Black-brown. Fore wing with a narrow orange-yellow fascia on costa and broad fascia on inner margin, very indistinct double ante- and postmedial lines. Underside paler

Hab. Pauk Yaw, Burma Exp 28 millim

1084 Insert (syn.) Adlullia stirasta, Swinh. A M N H (6) xn, p 214.

The form starasta from the Shan States has the basal purplish patch of fore wing reduced to a spot.

- 1087 a Euproctus oreosaura, Swah A M N H (6) xiv, p 435.
- Q. Differs from varia in the whole fore wing being brown irrorated with black, except the costal area which is yellow, and expands into a large patch in and beyond end of cell with the black discocellular spot on it, the marginal area yellow, interrupted at middle by a tooth from the brown area. Hind wing fuscous brown, the marginal area yellow. Thorax brown, except the collar Hab Khásis Exp 62 millim.
- 1088. Euprocies flavemaculata is a Mardara=1017 Mardara irrorata.
- 1105 a Euproctus renifera, Sucuh Trans Ent. Soc 1895, p 12
 - Q. Rufous grey-brown irrorated with fuscous, anal tuit

fulvous. Fore wing with prominent discocellular black lunule, an indistinct highly sinuous submarginal line; two or three black spots on the margin below apex. Hind wing more fuscous; cilia of both wings yellow.

Hab. Khásis. Exp 32 millim.

1106 a. Porthesia stigmatifera, n sp

Q Brownish ochreous irrorated with fuscous. Fore wing thickly irrorated with fuscous, except the inner medial area, traces of a rufous antemedial band and patch in cell; a more prominent blackish reinform stigma, some ill-defined postmedial and submarginal fuscous and rufous patches forming traces of bands. Hind wing with traces of medial and postmedial lines

Hab Bhután (Dudgeon) Exp 26 millim Type in B M

- 1116 Insert Leucoma saturnioides, Snell. Tyd v Ent. xxii, p. 105, pl 8, fig 7. Borneo, Sumatra; Java, Celebes, Australia—which has priority.
- 1124 Dendrophleps semihyalina Q. Fore wing more rounded, veins 4, 5 from cell Hind wing with no veinlets from vein 1a, veins 4, 5 from cell Pure white, the palpi, fore legs, and mid and hind tarsi bright orange Exp 48 millim
- Vol. I, p 496. Anagnia will stand, Peridrome being preoccupied

1134. Insert (syn) Neochera bhawana, Moore, Lep E.I C p 295, pl vu a, fig 4

The form bhawana from Burma and Java has no white patch on hind wing, which is wholly greenish fuscous with the veins white.

1150 a. Hypsa chloropyga, Wlk Cat 11, p 455 Hypsa analis, Wlk Cat v11, p 1677

Orange-yellow, palpi fuscous; patagia with a black spot, abdomen ringed with blue-black, the two last segments blue-black. Fore wing with black spots at base of costa and median nervure, red-brown spots in middle and end of cell and beyond end of cell, also below middle and end of cell

Hab Sikhim, Ceram, Australia. Exp. 60 millim

ARCTIIDÆ.

- 1201 Insert Arctia intercalaris, Eversm Bull. Soc Not Mosc. 1843, m, p. 544, pl 10, fig 1 a, b, which has priority.
- 1203 a. Arctia bretaudiaui, Oberth Ét Ent xx, p 54, pl x, figs 179, 180
- o. Differs from perornata in all the dark markings being reduced; fore wing with a fascia below median nervure from base

to end of cell, the submarginal band broken, the marginal very narrow Hind wing with the discocellular lunule separate from the postmedial band, no marginal band

Q with the wings aborted and much reduced Hab. Sikhim, 12,000 feet. Exp. 52 millim.

Vol II, p 32. Sebastia, Kirby, Cat Lep. Het. p 383 (1892), has priority over Moorea.

1254 proves, as was expected, to belong to a distinct genus —

Genus CARCINOPYGA.

Carcinopyga, Feld. Reis Nov, Erkl Taf lxxv-cvii, p. 2 (1874)

Type, O_hchenigera, Feld

Range Ladákh

Palpi porrect and reaching just beyond the frons, antenna simple, hind tibia with two pairs of small spurs. Fore wing broad; vein 3 from before angle of cell, 4, 5 from angle; 6 from

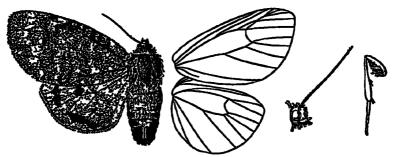


Fig 260.—Carcinopyga lichenigera, 2 1

upper angle, 9 and 10 anastomosing with 7, 8 to form the areole and emitted together. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle.

1281 a. Cyana alborosea, Wlk = quadrinotata, Wlk = pallens, Butl., is a distinct species, with no black edges to the bands of fore wing, male with no sexual patch on hind wing, female with veins 6, 7 stalked

- Hab China, Sikhim; Khásis; Moulmein, Sumatra Exp.

24 millim.

1284 a. Cyana dudgeoni, Hupen Trans Ent. Soc. 1895, p. 293.

Female with veins 4, 5 of fore wing stalked, 6 absent, one black spot. Male with no costal tuft or lobe and three black spots on fore wing, hind wing with veins 6, 7 stalked

Differs from peregrina in the palpi being white and fuscous. Fore wing without the black edges to the ante- and postmedial crimson bands Underside white in male, crimson in female.

Hab. Sikhim. Eap, of 26, 9 30 millim.

1285 a. Cyana javanica, Butl Trans. Ent Soc 1877, p 338

Fore wing of male with two black spots, of female with one

& Differs from peregrina in the fore wing having the subbasal line irregularly waved, the antemedial line more oblique, excurved in the cell and emitting a streak to near the two black spots, the postmedial line with its costal half oblique, then waved, a red spot beyond it on costa, the marginal band not extending round the apex and with its inner edge dentate

2 with the ante- and postmedial bands highly sinuous and with

prominent black eyes

The form from Shan States has the red bands of fore wing broader, with no black on their edges, the hind wing more crimson.

Hab Shan States, Java Exp, 336, Q42 millim

Genus BAROA, nov

Type B punctivaga, Wlk, from Java

Range Sikhim; Khásis, Java

Differs from Agrisus in the areole of fore wing being large and vein 10 given off from it, from Macrobrochis in vein 3 of each wing arising from angle of cell, vein 6 of fore wing from upper angle; 11 not anastomosing with 12.

1307 a Baroa vatala, Swinh A M N H (6) xiv, p 436, id Trans. Ent Soc 1895, pl 1, fig 18

d Ochreous white with a slight fuscous tinge, palpi with the



Fig 261 —Baroa vatala, o

3rd joint black, collar, tegulæ, pro-,meso-, and metathorax each with a black spot. Fore wing with two black specks near base below costa, four antemedial specks, one at end of cell; a series of eight postmedial specks. Hind wing with postmedial series of specks.

Hab. Sikhim, Khásis Exp. 36 millim

Genus Macrobrochis —Sect I B Antennæ of male with short branches dilated distally

1308 a Macrobrochis semirufa, n sp

3. Differs from metaxantha in the head and collar being dark red-brown, abdomen orange-brown suffused with fuscous above, fore wing darker, the costal and outer areas orange-brown below, hind wing uniform orange-brown

Hab Khásis Evp 54 millim Type in coll Elwes

- 1308 b. Macrobrochis metaxantha, Hmpsn Trans Ent Soc 1895, p 292
 - Q. Fuscous brown, frons, collar, and abdomen orange Fore

wing with vein 6 from the arcole, uniform fuscous brown. Hind wing orange, a fuscous-black marginal band, broad at costa, narrowing to anal angle Underside with the thorax and basal half of costa of fore wing orange.

Hab. Bhutan. Exp 60 millim.

1317 a. Gnophria collitoides, Butl Cist Ent. in, p 115

Fuscous, collar orange or fiery red, legs and abdomen below yellow Fore wing with orange costal fascia from near base to near apex Hind wing paler

The Japanese form is darker than the Sikhim form, and has the

costal fascia broader In the single male the head is yellow

Hab. Japan. Yatong, Sikhim, 13,000 feet. Exp., ♂ 36-40, ♀ 36-48 millim.

Genus LOBOCRASPIS

Lobecraspis, Hmpsn Trans Ent Soc 1895, p. 293

Type, L griseifusa, Hmpsn.

Range Burma

Palpi upturned and reaching vertex of head, antennæ of male minutely ciliated, fore tibiæ of male thickly fringed with hair, mid and bind tibiæ without spurs and with immense tifts of long hair, the proximal joints of tarsi fringed with hair. Fore wing long and narrow; the costa nearly straight; the outer margin erect from apex to vein 4, where it is angled, then very oblique, the inner margin with a large lobe before the middle, vein 3 from before angle of cell; 6 from below upper angle, 7 from the angle; 8, 9, 10 stalked, 11 free Hind wing with the apex rounded, veins 3, 4, 5 from close to angle of cell, 6, 7 from upper angle, male with the inner area clothed with long hair.

1322 a. Lobocraspis griseifusa, Hmpsn Trans Ent Soc 1895, p 293.

Tawny ochreous; thorax and abdomen suffused with greyish fuscous, hind tibiæ of male with the tufts fuscous, mid tibiæ with



Fig. 262 — Lobocraspis griseifusa, Q. .

them tipped with fuscous. Fore wing with greyish-fuscous specks on costal area, which are developed into obscure spots in and beyond the cell; the whole inner area suffused with greyish fuscous, except a tawny spot on the lobe, a dark

spot on outer margin below apex. Hind wing fuscous, the cell

whitish, the margin tinged with ochreous, male with the inner area below the cell and vein 5 suffused with fuscous Underside ochreous, fore wing with the cell suffused with fuscous, with a pale spot in it and another on discocellulars

Hab Yaw, Burma, Dawnat Range, Tenasserim Evp

44 millim

1334 a Prabhasa cana, n sp

of Fore wing with the apex rectangular, the inner margin nearly straight, the fringe of scales extending to end of cell, the arcole present. Head, thorax, abdomen, and fore wing greyish white with an ochreous tinge, the last with traces of a highly excurved line from middle of costa to inner margin beyond middle, slight dark streaks on veins of outer area. Hind wing yellowish white

Hab Khásis. Eap. 28 millim Types in coll Elwes and B. M.

1348 a Lithosia chrysophleps, Hmpsn Trans Ent. Soc 1895, p 294

Q. Orange-yellow; the head black, collar orange, thorax and abdomen suffused with fuscous Fore wing with the whole of the interspaces suffused with fuscous, leaving the veins, margins, and cilia orange Hind wing uniform orange Underside of fore wing with the disk only suffused with fuscous.

Hab Bhután Erp 42 millim.

1358 Lithosia conforms d. Frons, vertex of head, and abdomen above orange-yellow Fore wing whiter, underside with the base of costa blackish, the end of cell and subcostal and median nervures and nervules suffused with fuscous

Hab Khásis

1367. Insert (syn) Pelosia tetrasema, Meyr Trans Ent. Soc. 1894, p 2

1370 a. Lithosia sthenoptera, n sp

d with a fold in cell of fore wing, but without modified scales on fore and hind wings Bright ochreous; abdomen tinged with fuscous except the anal segment, in female prominently fuscous Fore wing very narrow in male, the costa highly arched towards apex in both sexes, hind wing somewhat paler

Hab Khasis Exp, of 28, 2 34 millim Types in coll. Elwes

and B. M.

Genus Mithuna — Secr II. Antennæ of male bipectinate; fore wing with vein 6 stalked with 7, 8, 9, 10.

1372 a. Mithuna fuscivena, n sp

d. Fuscous brown. Fore wing with fuscous streaks on the

veins, diffused on costal, subcostal, and median nervures Hind wing pale dull ochreous

9 Head, thorax, and fore wing uniform pale dull rufous

brown

Hab. Ceylon (Pole). Exp 16 millim Type in B M.

1381 a Gampola normalis, n sp.

Shape and neuration as in females of the typical species. Yellowish brown suffused with grey, fore wing thickly mottled with grey, hind wing slightly paler and yellow.

Hab. Khasis. Emp 28 millim Type in coll Elwes.

1386 a Æmene amnæa, Swinh A M. N H (6) xiv, p 437, and Trans Ent. Soc 1895, pl 1, fig 13

d Head and thorax white spotted with black, abdomen fuscous. Fore wing white, black basal spots on costs and below median nervure, an antemedial sinuous line, broad at costs and obsolete between median nervure and vein 1, a discocellular black lunule conjoined to the double waved postmedial line, which is filled-in with fuscous from costs to vein 3 and towards inner margin, and incurved from vein 4 to inner margin, a submarginal sinuous maculate line, with lunules on it at costs and above middle, marginal spots at apex and middle of outer margin. Hind wing fuscous black

Hab Khásis Exp 22 millim

1386 b Æmene diffusifascia, Swink A. M N. H (6) xvii, p 362

of. Grey. Fore wing with basal fuscous spot on costa; a sub-basal spot on median nervire with a semicircular mark beyond it, an antemedial spot on costa, a diffused black-brown medial band, broadest on disk, an ill-defined maculate postmedial line, with black patch beyond it on costa and smaller spots at middle and on inner margin, a marginal series of short strue and fuscous spots at apex and middle. Hind wing slightly tinged with fuscous, underside with discocellular spot and diffused postmedial line.

Hab Khásis. Exp. 22 millim.

1393 a Oxacme marginata, n sp.

1.

d. Antennæ chiated Head, thorax, and fore wing whitish, irrorated with dark scales, abdomen blackish, clothed with white hair, the anal tuft ochreous. Fore wing with dark medial and postmedial specks on costa and some others near apex and on outer margin above and below the angulation. Hind wing yellowish white, with the margin and base of chia fuscous, developing into a patch at apex.

Hab. Khásis Emp. 20 millim Types in coll Elwes and B M.

Genus SICULIFER, nov

Type, S bilineatus, Hmpsn

Range Khásis

Palpi short and porrect, antennæ of female nearly simple, tibiæ with the spurs well developed, anal tuft of female large Fore wing with the costa much arched towards apex, which is strongly falcate, vein 2 much curved, 3 from before angle of cell; 4 absent, 6, 7, 8, 9, 10 stalked, 11 from augle of cell Hind wing with vein 3 absent, 4, 5 and 6, 7 stalked, 8 anastomosing with the cell to middle

1393 b Siculifer bilineatus, n sp

2 Head and thorax dark red-brown, abdomen fuscous Fore

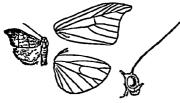


Fig 263 Siculifer bilineatus, P 1

wing dark red-brown, the area towards outer angle yellowish, a straight dark slightly oblique medial line and erect postmedial line, cilia dark. Hind wing fuscous, the cilia on anal halt pale

Hab Khásis E_{1p} 20 millim. Types in coll Elwes and B M

Genus EUCYCLOPERA

Eucyclopera, Hmpsn Trans Ent. Soc 1895, p 294

Type, E_plagidisca, Hmpsn

Range Bhután

Q. Palpi porrect and short, antennæ minutely ciliated tibiæ with the spurs short abdomen with large anal tuft. Fore wing short and broadly lanceolate, the costa much arched, the outer margin oblique, veins 3, 4, 5 stalked, 6, 7, 10, and 11 from cell, 8, 9 absent. Hind wing with veins 3, 4, 5 from close to angle of cell; 6, 7 on a long stalk

1394 a Eucyclopera plagidisca, Hmpsn Trans Ent Soc 1895, p 294

P Head whitish, thorax and abdomen fuscous, the anal tuft

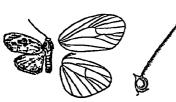


Fig 264
Eucyclopera plagidisca, Q 3

grey Fore wing whitish suffused with fuscous, traces of sinuous subbasal and medial dark lines, the latter with a large round spot on its inner edge on disk, a dentate postmedial line from the spot to near outer angle, a diffused curved submarginal band not reaching the costa or inner maigin. Hind wing fuscous

Hab Bhután Eap 16 millim

1397. Insert Diduga (Petane) fiavicostata, Snell Tyd. v. Ent. xxii, p 92, pl 10, fig. 8, which has precedence. Pulo Laut.

Genus LOBOBASIS, nov.

Type, L nivermaculata, Hmpsn.

Range, Bhután.

Palpi porrect, extending just beyond the frons, antennæ of male ciliated Fore wing with the costa highly arched at base, with a rounded patch of raised scales and slight fringe of hair beyond it below the costa, and



tremity running round to base of inner margin, vein 2 from near angle of cell, 3, 4 stalked, 5 absent; 6 from upper angle; 7, 8 stalked, 9 absent, 10, 11 free, the latter curved. Hind wing very broad, the costa

with rough hair from its ex-

highly arched, a glandular

Fig 265 — Lobobasis nivermaculata, 3

patch of scales on the costal nervure and end of subcostal, vem 2 absent, 3, 4 from angle of cell, 5 absent, the cell closed, 6, 7 stalked, 8 curved up to costa

1398 a Lobobasis nivermaculata, n sp

3 Head yellow, the vertex of head, collar, and part of patagra and mesothorax snow-white, the rest of thorax red-brown, abdomen yellow Fore wing red-brown; the costal and outer margins yellow, a large round white spot at base of costa, and a triangular postmedial patch on inner margin. Hind wing yellow

Hab Bhutan, 2500 feet (Dudgeon). Evp 20 millim Type in

B. M.

Genus Garudinia —SECT II Fore wing of male with a tuft of long hair in cell below, the cell very long, vein 1 b curved upwards and 2 curved downwards so as almost to meet; 3, 4 from lower angle of cell, 8 absent Hind wing with patches of modified scales above in cell near lower angle and below costs towards apex, the subcostal nervure fringed with scales below, the cell long, and veins 3, 4 from angle.

1400 a Garudinia biplagiata, n sp

d. Head and thorax white, abdomen fuscous, the anal tuft ochreous Fore wing white, a large semicircular leaden fuscous medial patch from subcostals to inner margin, a similar semilinar postmedial patch from below costa to outer angle. Hind wing pale, suffused with fuscous towards margin; the patches of scales ochreous.

Hab Bhutan, 2500 feet (Dudgeon) Exp. 18 millim. Type in

B.M.

Vol. II, p 100 Under Anachrostis insert Mimeugoa, Hmpsn. Trans Ent Soc 1895, p 294, for Sect II.

1405 a Anachrostis hypomelas, Hmpsn Trans Ent Soc 1895, p 295

& With a tuft of long hair on upperside of hind wing from the middle of cell, directed obliquely upwards to the base. Pale yellowish brown, palpi black at sides. Fore wing irrorated with black, six black specks on costa, an annulus at end of cell; a subapical fuscous patch, a series of black marginal specks. Underside with a large black patch covering the costal half of basal two-thirds of wing

Q without the black patch on underside Hab Sikhim, Bhután Evp 20 millim.

1406 Insert (syn) Mimcugoa edentifascia, Hmpsn Trans Ent. Soc 1895, p. 295

Genus GALLERIDIA, nov

Type, G atrisigna, Hmpsn

Range Ceylon

Palpi upturned, broadly scaled, and reaching vertex of head, the 3rd joint minute, from produced to a rounded prominence, antennæ of male minutely chiated, tibiæ with the spurs long Fore wing long and narrow, veins 3, 4, 5, 6 and 7 well separated at origin, 8 9 stalked, 10, 11 free Hind wing with veins 3, 4 stalked, 5 from somewhat above lower angle of cell, 6, 7 from upper angle

1407 a Galleridia atrisigna, n sp

Pale brown suffused with grey and irrorated with fuscous Fore



Fig 26b — Galleridia atrisigna, d 💈

wing with the costa rufous, a prominent short black fascia below end of cell, some black specks near upper angle, an oblique fuscous shade from apex, a marginal series of black specks. Hind wing brownish white, the apical area rather browner with some marginal dark specks.

Hab Ceylon (Pole) Exp 16 millim Type in B M

1407 b Galleridia fuscizonea, n sp

Grey-brown irrorated with fuscous Fore wing with diffused fuscous medial band traversed by three very obscure waved dark lines, a black discocellular spot, traces of a pale crenulate submarginal line outlined with fuscous, a marginal series of dark specks. Hind wing fuscous. Underside with black discocellular spot and traces of curved postmedial line.

Hab Ceylon (Pole) Exp 14-16 millim Type in B M

Genus TOLPIA

Tolpin, Wik Cat arrai, p 449 (1863)

Type, T conscitulana, Wlk. Range Ceylon, Borneo

Palpi poniect and reaching well beyond the frons, antennæ of male minutely ciliated, tibiæ with the spurs long. Fore wing short and broad, veins 3 and 5 from close to angle of cell, 6 from well below upper angle, 7 from the angle, 8 and 10 stalked, 9 absent. Hind wing with vein 3 absent, 5 from above lower angle of cell, 6, 7 stalked.

1407 c Tolpia conscitulana, Wil Cat xxviii, p 450

d Brown suffused with fuscous, head and collar smoky black



Fig 267 — Tolpia conscitulana, o 🖫

Hab Ceylon, Sarawak

Fore wing with subbasal black speck on costa, indistinct waved antemedial, postmedial, and submarginal lines arising from black specks on the costa, the first with ochreous mner edge, the two latter with ochreous outer edges, a pale discal patch Hind wing fuscous, darkest towards outer margin.

Exp. 12 millim

Vol II, p 103 Transfer Trichogyia to the Limacodidæ next Alæogyia.

1419 Insert (syn) Scaptesyle integra, Swinh A M N H (6) xiv, p 437 This is the form from the Khásis described in text

1439 a Miliochrista disticha, Meyr Trans Int Soc 1894, p 2

2. Orange-red, abdomen paler Fore wing with black dot at base, an antemedial series of four small round black spots and medial series of five spots Hind wing pale 10sy

Hab Shan States Exp 27 millim

1445 a Miltochrista hololeuca, Hmpsn Tians Ent Soc 1895, p 296

3. Pure white; palpi and a stripe on outer side of fore tibiæ black

Hab Bhután. Erp 88 millim.

1451. Insert (syn) Miltochrista geodetis, Meyi Trans Ent Soc 1894, p 4

1459. Insert (syn) Miliochrista celidopa, Meyr Trans Ent. Soc 1894, p 3=the form calamana

1461 a Miltochrista eccentropis, Meyr Trans Ent Soc 1894, p 3
d. Head white, palpi fuscous, thorax orange, white behind.

Fore wing white, a dark grey round subbasal spot, two curved antemedial series of five spots, a curved orange antemedial band, a black discal spot, a postmedial line excurved round cell, with all the veins beyond it streaked with black. Hind wing ochreous white, the veins streaked with fuscous towards outer margin, more shortly towards anal angle

Hab Shan States Exp 20 millim

1461 b Miltochrista umbrosa, n sp

d. Head and thorax ochreous, almost wholly suffused with bl.ck-brown, abdomen black and grey-brown Fore wing with the ground-colour whitish, with a very large triangular black-brown costal patch on basal area and the irregular postmedial band diffused in places to the margin, occupying almost the whole wing except the inner basal and medial areas, a basal dark spot, subbasal and antemedial series of two spots, and a medial oblique series of six spots Hind wing yellowish, with diffused fuscous marginal band narrowing to anal angle

Hab Khásis Exp 30 millim Type in coll. Elwes.

1463 a Miltochrista eschara, Swinh A M N H. (6) xiv, p 438.

Q Bright ochreous Fore wing with a triangle formed by two black lives radiating from base of median nervure and conjoined to a medial line which is excurved at middle and joined at vein 4 by a highly curved postmedial line sending three streaks towards the apical half of outer margin, a spot near outer angle and prominent marginal line

Hab Khásis. Eap 20 millim

1465 a Miltochrista nigriradiata, n sp

Q Bright rose-pink; palpi and fore legs blackish. Fore wing with the base of costa black; two black spots at base; an antemedial black line excurved in cell, inwardly dentate below cell and outwardly dentate on vein 1, a straight oblique medial line; a black discocellular spot, a postmedial line excurved round cell and incurved below it, with seven streaks on the veins beyond it, the one below costa forked; all the markings very prominent.

Hab. Bhután (Dudgeon). Exp 28 millim. Type in B. M.

- 1473. Insert (syn) Ammatho epixantha, Meyr. Trans. Ent. Soc. 1894, p. 2 The yellow form from the Khásis and Shan States.
- 1475. Insert (syn.) Miltochrista callinoma, Meyr. Trans. Ent. Soc. 1894, p 3.

1486 a Nudaria fulvipicța, n sp.

d. Ochreous white Fore wing with ill-defined dark subbasal line and incomplete curved fulvous antemedial line, the area beyond middle suffused with fuscous, with a large dark-edged

fulvous patch from lower angle of cell to costa; a pale dentate nostmedial line; a submarginal series of fulvous streaks on the veins ending m black marks on the margin at costs, vein 4. and mner margin; ochreous patches on the margin above and below middle.

Hab. Khásis. Exp. 16 millim. Type in B. M.

1488 a. Nudaria fumidisca, n. sp

d. Yellowish white. Fore wing with fuscous markings at base; the medial inner area smoky black, connected with costs by sinuous ante- and postmedial brown lines and joined to a spot in the cell, traces of some brown submargmal markings and a prominent dark spot near outer angle Hind wing semiduphanous, with slight fuscous suffusion between the cell and anal angle.

Hab. Khásis. Exp. 18 millim. Types in coll. Elwes and B. M.

1488 b. Nudaria promelæna, n sp

d. Head, thorax, and abdomen ochreous white. Fore wing fuscous brown, with irregular white fascia on base of inner margin, traces of a pale sinuous antemedial line; dark specks in end of cell and on discocellulars; a pale dentate postmedial line, angled beyond lower angle of cell and expanding into a patch on inner margin; a dentate line just inside margin expanding into a patch below apex and interrupted at middle. Hind wing ochreous white, with traces of curved postmedial line

Hab. Khásis. Exp 18 millim. Type in B. M.

Genus Cacyparis.—SECT. II. Fore wing with vein 7 from cell, 8, 9, 10 stalked Hind wing with veins 3, 4 shortly stalked

- 1496. Cacyparis lesta Insert (syn) Tortrux fimbriana, Wlk Char. Undescr. Het p. 101; C. & S. no 4749.
- d. Hind wing with small black patch on excurved part of outer margin, underside with large black patch on middle of inner area and small patch on the margin.
- 1515 a. Siglophora ferreilutea, Hmpsn Trans Ent Soc 1895, p 296
- 2. Bright orange-yellow; head, thorax, and abdomen marked with deep red. Fore wing with eight deep red dentate lines, two of the antemedial lines having ferruginous between them; a ferruginous patch on middle of inner margin, the outer area from below the apex to nearly the middle of inner margin almost completely covered by a ferruginous patch. Hind wing with the basal and costal areas white, the inner and outer areas yellow turning to ferruginous.

Hab. Sikhim. Exp 30 millim.

- 1520 a. Nola laticineta, n. sp
 - c. Differs from fragilis in the thorax and abdomen being tinged

with fuscous. Fore wing with the whole area between the anteand postmedial lines dark brown, the postmedial line angled at middle; the submarginal line bent inwards towards costs. Hind wing tinged with fuscous

Hab. Bhután, 2500 feet (Dudgeon). Exp. 14 millim. Type in

в м.

1524 a. Nola punctilmeata, n sp

Q. Brownish grey. Fore wing with subbasal black streak below costa, an oblique antemedial series of three black specks; a medial series of specks almost joined at inner margin by an oblique postmedial series; a submarginal waved series. Hind wing fuscous, with dark discocellular line

 \overline{Hab} . Bhután, 2500 feet (Dudgeon). Exp. 22 millim. Type in

B. M.

1528. Nola pascua Hind wing of male with a fold on inner area containing a tuft of brown hair and some thick hair below.

1532 a. Nola obliquifasciata, n. sp.

Q. Head white; palpi black, white at tip; antennæ black; thorax fuscous, the patagis white-tipped, abdomen fuscous. Fore wing white; a greyish-black patch at base of costa, a broad oblique greyish-black band from middle of costa to near outer angle with waved black edges, some shining scales on it, and a dark spot below costa and white spot at middle; a dark patch on costa before apex, with traces of a sinuous submarginal line arising from it; a large triangular greyish-black patch occupying most of outer area; a marginal series of black specks. Hind wing pale fuscous. Hab Ceylon (Green) Exp. 16 millim. Type in B. M.

1534 a Nola marginata, Hmpsn Trans Ent Soc 1895, p 296

Head pure white, thorax and abdomen with a slight fuscous tinge. Fore wing pale fuscous, the costal area pale brown, with two postmedial white specks; a black speck at upper angle of cell; traces of an oblique dark medial line, a sinuous submarginal line excurved between veins 5 and 2, with the fuscous deepening to black on its inner edge and the area beyond it pale brown. Hind wing white with a slight fuscous tinge.

Hab. Bhután Exp 16 millim

Antennæ of male bipectinate.

1534 b. Nola microphasma, Butl Cist. Ent. in, p 117 Rhynchopalpus grisealis, Swinh Trans Ent Soc 1895, p 25

Greyish white slightly suffused with brown. Fore wing with two dark specks below base of costa; an antemedial series of specks; a dark spot in end of cell; a postmedial curved series of specks and a submarginal waved series. Hind wing whiter

Hab Japan, Paután; Khásis Evp. 14 millim

Nos 1522. Nola denticulata, and 1533 N. major, also belong to this section, the latter has 3 18 millim, and occurs also in Sikhim, Bhután, and Burma.

1534 c Nola tesselata, n sp

d. Head and thorax white, palpi brown at sides, vertex of thorax fuscous, abdomen brownish. Fore wing with the basal area white, with dark mark on base of costa, its outer edge angled below cell, the rest of wing fuscous irrorated with metallic scales, postmedial and apical almost conjoined white patches on costa and another at outer angle; traces of crenulate postmedial and submarginal dark lines angled at middle. Hind wing whitish

Hab Khásis Exp 20 millim. Type in B M

SECT. III Fore wing with vein 9 present and given off from 8. 1534 d. Nola nigrisparsa, n. sp

Q Head, thorax, and abdomen greyish white irrorated with black, palpi blackish. Fore wing white irrorated with black, a short black streak below base of costa; three tufts of scales in the cell; an indistinct waved and curved antemedial black line, two irregularly waved medial black lines excurved beyond cell and with a blackish patch between them from costa to vein 5, an oblique line across the apex and blackish patches on outer area at middle and outer angle. Hind wing blackish fuscous

Hab. Bhután, 2500 feet (Dudgeon). Exp 18 millim. Type in

B. M

1534 e Nola tenebrosa, n sp.

Q Head and thorax brown; abdomen grey. Fore wing brown, with a broad band of purplish fuscous suffusion from middle of costa extending obliquely to base of inner area, an indistinct antemedial black line angled below costa and with a blackish patch beyond it on costa; a postmedial line sharply angled below costa and slightly on vein 4, a diffused irregularly waved submarginal line, two tufts of scales in the cell Hind wing fuscous.

Hab Bhutan, 2500 feet (Dudgeon). Exp. 20 millim Type in

B. M

1539 a Pisara discisignata, n. sp

d Head and thorax white, the head and collar tinged with rufous, the palpi fuscous, abdomen pale fuscous. Hind wing whitish, suffused with fuscous except on inner basal area, the medial area tinged with rufous, with some ill-defined fuscous spots on it and a prominent black discocellular spot, bounded inwardly by an indistinct sinuous line and outwardly by a line excurved round end of cell; traces of a submarginal line; a marginal series of dark specks. Hind wing pale fuscous

Hab. Hambantota, Ceylon (Pole) Exp 12 millim. Type

ın B. M.

1540 a. Pisara argentescens, Hmpsn Trans Ent Soc 1895, p. 296.

2 Silvery grey, slightly suffused and irrorated with fuscous. Fore wing with traces of curved subbasal line, a large fuscous patch on middle of costa extending down to vein 2, an indistinct crenulate postmedial line with curved line beyond it and fuscous suffusion between them; an indistinct curved and irregularly sinuous submarginal line Hind wing fuscous.

Hab. Sikhim. Exp 26 millim.

1540 b Pisara fuscibasalis, n sp.

Fuscous brown and grey Fore wing with the basal half suffused with fuscous brown, leaving a large grey patch on basal inner area, curved and slightly sinuous dark antemedial and medial lines, an indistinct postmedial line excurved from costa to vein 4, then incurved, the postmedial area grey, the outer area fuscous. Hind wing fuscous, pale at base

Hab Ceylon (Pole); Thayetmyo, Burma (Watson). Exp. 14

millim Type in B M.

1541 a Pisara mediozonata, n sp

d. Greyish white. Fore wing with a rounded brown spot on base of costa, a broad medial fuscous band irrorated with a few shining scales, and with two rounded brown spots on it at costa, a black line on its inner edge expanding towards the first brown spot and two slightly irregular black lines on its outer edge, an irregular fuscous submarginal line and a marginal line. Hind wing paler fuscous, with a dark discocellular mark.

Hab Bhután, 2500 feet (Dudgeon). Eap. 16 millim. Type in

B. M.

1541 b. Pisara seminigra, n sp.

2. Pure white, palpi black, abdomen tinged with fuscous towards extremity. Fore wing with a short oblique black band from costa near base, with leaden-coloured scales on it; a similar band at middle conjoined to a postmedial band of tufts of leaden-coloured scales, the area beyond it brown suffused with black, an irregular submarginal series of tufts of leaden-coloured scales. Hind wing with the outer area suffused with fuscous

Hab. Bhután (Dudgeon) Exp 18 millim Type in B. M.

1543 a. Pisara argentisparsa, Hmpsn Trans Ent Soc. 1895, p 297.

3. Head and thorax white, abdomen suffused with fulvous and fuscous, wings white, suffused with fulvous and fuscous and irrorated with a few brilliant silver scales. Fore wing with traces of minutely dentate ante- and postmedial lines, the latter much excurved beyond cell.

Hab Sunla. Exp 22 millim

SECT III. Antenna bipectinate in both sexes; fore wing with vein 10 anastomosing with 7, 8, 9, enclosing in male a small hyaline fovea covered by a valve of scales above.

1545 a. Pisara gemmata, n sp.

Head, thorax, and abdomen whitish; palpi at sides and shaft of antennæ black. Fore wing yellowish white, the costal area to beyond middle suffused with black; the outer area rufous below apex, blackish towards outer angle, the basal, costal, and outer areas irrorated with raised metallic scales, two tufts of metallic scales on discocellulars, and in male a valve above them covering the foves and almost joined to a sinuous postmedial line of raised metallic scales, a very irregularly sinuous submarginal line of raised metallic scales. Hind wing pale fuscous.

Hab. Sikhim (Pilcher). Exp. 18 millim. Type in B. M.

Genus CYPHOTOPSYCHE.

Cyphotopsyche, Hmpsn Trans. Ent. Soc 1895, p. 297

Type, C. ustrpennis, Hmpsn.

Range. Bhutan.

Palpi porrect, extending about the length of head, the 2nd joint thickly scaled, the 3rd naked; antennæ of male hipectinated with short branches to two-thirds length and with a large tuft from basal joint; the collar forming large upright paired triangular hoods extending over the head, abdomen with a pair of large corneous wing-shaped plates from base extending over dorsum. Fore wing with veins 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 and 6, 7 stalked; 5 from middle of discocellulars.

1545 b. Cyphotopsyche ustrpennis, Hmpsn Trans Ent Soc 1895, p 297

d. Head, thorax, and abdomen clothed with greyish, dark



Fig. 268.
Cyphotopsyche ustrpennis, 6 1.

rufous, and black scales. Fore wing grey-brown, the costal area dark fuscous; ill-defined dark streaks in the interspaces; a dark fascia from lower angle of cell to outer margin, a dark patch on outer margin below apex, the margin and cilia dark fuscous. Hind wing pale

greyish, the cula fuscous at apex.

Hab. Bhután. Exp. 24 millim.

Larva. Early stages: creamy buff with dorsal, subdorsal, and sublateral series of small warts bearing tufts of long buff hairs; four pairs of prolegs, the 6th somite being without prolegs; the cast skins of the head are attached to a long tuft of hair projecting forward from 1st somite, so that the number of moults can be counted by the number of skins present.

The full-grown larva is snow-white, covered with a down-like

detachable substance with slight creamy tinge below; the hairs white except five or six long black hairs on thoracic somites; head buff, marked with brown strie; a dorsal black mark on 1st somite, partly hidden by the head-bearing tuft which after the last moult bears five head-skins. The larva progresses with a jerky motion, it forms a flap-like cocoon by biting off pieces of rotten wood and bark and interlacing them with its long hairs which are left projecting, before fastening down the flap it rubs its head against it for a long time, and with much difficulty detaches the tuft and head-skins and attaches them to the side of the cocoon

1547 a. Selca ruficostata, n sp

Q. Grey, thickly irrorated with fuscous. Fore wing with the costal area chestnut to beyond middle, including almost the whole of the cell, in which are three tufts of raised scales and two on the discocellulars; traces of an irregular dark antemedial line, a postmedial line excurved between veins 6 and 3, then very oblique; an irregularly and highly dentate submarginal line. Hind wing dark fuscous.

Hab Bhután (Dudgeon). Exp. 32 millim. Type in B.M.

AGARISTIDÆ.

Vol. II, p. 149. In the genus Eusemia transfer all, except Sect III, to Chelonomorpha.

NOCTUIDÆ.

1605 a. Heliothis hyalosticta, Hmpsn. Trans. Ent. Soc. 1895, p 298.

d. Grey. Fore wing irrorated with brown; traces of a waved subbasal line; some dark specks on costa, a spot on discocellulars; a postmedial curved series of specks on the veins and a marginal series. Hind wing paler, a dark discocellular lunule, an indistinct curved postmedial line, the outer area slightly darker. Underside with the discocellular spot of fore wing deep black.

Hab. Karáchi. Exp. 22 millim.

- 1616. Transfer Arsiloncha roseana, Swinh., and the locality Bhámo, Burma, to 1615, Chariclea irrorata.
- P. 180. Raghuva Male with glandular swelling at middle of costa of fore wing

Genus TRICHANARTA, nov.

Type, T. ladakensis, Feld.

Range. Himalayas

Palpi porrect, fringed with long hair below and reaching just beyond the large frontal tuft; eyes hairy and with long lashes; antennæ ciliated; tibiæ strongly spined, thorax and abdomen without tufts. Fore wing with the outer margin non-crenulate. Hind wing with veins 3, 4 from cell.

1619 a. Trichanarta ladakensis, Feld. Ress Nov. pl. 108, fig. 38, C. & S no 1964.

Q Grey-brown irrorated with black. Fore wing with minutely







Fig 269 Trichanarta ladalensis, Q. 4

waved antemedial line; deep black orbicular and claviform spots; the remform large with black outline and fuscous centre, a waved dark submarginal line terminating on vein 2, a marginal series of specks Hind wing pale yellow; the basal and inner areas irrorated with black, a discocellular speck; a fuscous submarginal

mark on apical area. Underside almost white, the discocellular black marks and submarginal bands very prominent

Hab. Ladákh. Exp. 20 millim.

1622. Agrois becomes = A spinifera, Hubn Samml. eur. Schmett., Noct. fig 389, which has precedence.

1627 a Agrotis postfusca, n sp

Antennæ of male with fascicles of cilia at end of branches.

G. Head and thorax pale ochreous and fuscous, palpi black and rufous except the end of 2nd and the 3rd joint; abdomen fuscous, the anal tuft fulvous. Fore wing ochreous grey, with indistinct double waved antemedial line dentate inwards on vein 1; the orbicular and remiform large and grey, with a black patch between them and another before the orbicular in cell; a large black patch beyond the remiform crossed by the double waved postmedial line; a marginal series of dark specks. Hind wing fuscous, the chapale. Underside with discocellular spot and sinuous postmedial line, the costal area fuscous, the inner area pale.

Hab. Ceylon (Green). Exp. 34 millim. Type in B. M.

1628. Agrotis intracta=1646, A modesia, and has precedence.

1636 Omit Apamea nubila, Moore, from the synonymy (see 1729 a).

1679 a. Hadena agrotiformis, n. sp

o. Grey-brown; abdomen with a white-tipped dorsal tuft on basal segment. Fore wing with traces of a short subbasal line, an indistinct crenulate antemedial line with fuscous suffusion between it and the subbasal line; the orbicular a dark annulus; claviform prominent and filled-in with fuscous, remform very large, with fuscous centre; the postmedial line represented by a series of white and dark specks on the veins, excurved beyond cell; white specks on outer half of costa; dark streaks on veins of outer area and small triangular marginal marks between the veins. Hind wing white, with traces of a diffused submarginal fuscous band.

Hab. Ceylon (Pole). Rep. 28-30 millim. Type in B. M.

- 1681. Hadena? hastata 18 an Euplexia near 1714, E. adjuncta (abdomen of type wanting)
- 1693 Hadena cuprina is an Eurois=1783, which is not E chalybeata (see 1783 a).
- 1696. Hadena indica is an Acronycta = A rumicis, Linn Syst. Nat 1, 2, p S52. Europe, N.W. Himalayas.
- 1713 Insert (syn) Bombycia hodita, Swinh. A. M. N H. (6) xv, p. 6
- 1729 a Euplexia nubila, Moore, P Z S 1881, p. 346, pl 38, fig 10, C & S no 2057
- c. Red-brown suffused with purplish grey, abdomen pale brown, with rufous dorsal tufts. Fore wing with irregular black streak below base of median nervure, a double curved and waved antemedial line, the orbicular and reniform large, indistinct and ovoid, claviform black-edged and kidney-shaped, a double waved postmedial line highly excurved beyond cell, a black streak from it to the indistinct double dentate submarginal line below vein 2 Hind wing pale red-brown. Underside with indistinct cell-spot

Hab. Sikhim Exp 40 millim

- 1741 a. Euplexia chlorerythra, Swinh Trans Ent. Soc 1895, p. 41, pl. 1, fig 6.
- J. Palpi black, the end of 2nd joint white; head and thorax white slightly tinged with green, abdomen black, with some white at base, on vertex, and extremity. Fore wing pale green at base, a subbasal pale rufous band with black specks on its inner edge, triangular black mark below cell, and sinuous white outer edge, the medial area pale green, a black speck below middle of cell, the orbicular and reniform white, partially edged with black and with black suffusion above, between, and below them; costa speckled with white and black; a white postmedial line incurved below vein 4 and expanding towards inner margin, the area beyond it bright rufous, becoming ochreous towards the margin, with an obscure minutely dentate submarginal black line followed by a series of specks, cilia black. Hind wing fuscous black; an indistinct postmedial line; the base of cilia ochreous Underside of fore wing and costal half of hind wing black, the margin of both wings and inner half of hind wing whitish, hind wing with cellspot and postmedial line; both wings with some submarginal specks

Hab. Khásis Erp 36 millim.

- 1743 a Euplexia plumbeomarginata, Hmpsn Trans Ent. Soc 1895, p 298.
- d Head and collar ochreous, the latter tipped with leaden grey; thorax leaden grey and ochreous: abdomen leaden grey, ochreous at base. Fore wing ochreous white, slightly irrorated with fuscous, some black specks at base; a large oval black patch

from middle of costa to below vein 2, embracing the large U-shaped remiform with its inner arm very broad, the patch then continued to inner margin as an oblique line with some rufous on its outer edge; an irregularly dentate submarginal black line, with the area beyond it leaden grey except for an ochreous apical spot. Hind wing fuscous, with traces of pale postmedial band, both wings with a fine white line at base of cilia. Underside ochreous, mostly suffused with black.

Hab N Khyen Hills. Exp 32 millim

1755 is Euplexia icamba, Swinh. A. M. N. H. (6) xii, p. 260, not no. 1757.

1757. Rename E viridinigra, Hmpsn, nom nov.

1777 Eurois albicostata = 2537 Baniana? conjugata, and must stand as Eurois conjugata.

1780 a. Eurois chalcochlora, n sp.

Pale yellowish olive-green Fore wing with short sinuous subbasal line, an irregularly dentate antemedial line; the orbicular and remiform white-edged, the former small, the latter with fuscous centre and contracted at middle, a series of white spots on apical half of costa, an indistinct minutely dentate dark postmedial line and incomplete white submarginal line, a series of black marginal specks edged by white lumiles. Hind wing fuscous above, with indistinct dark discocellular lumile and sinuous postmedial line, calia olive, below whitish, the costal half irrorated with olive, the spot and line black

Hab Sikhim (Pilcher) Eup. 30 millim Type in B. M.

1783=1693 and should stand as Eurois cuprina, Moore.

1783 a. m Sect III :--

Eurois chalybeata, Wik Cat xxxII, p 665, C & S no 2071 Mamestra suffusa, Moore, P Z. S. 1867, p 52, C & S no 2081.

Differs from cuprena in being without the ferruginous tange. Fore wing longer and narrower, with the remform sometimes white, a few blue-white scales on the veins, especially at outer margin; the submarginal line slightly more incurved between veins 6 and 4 Hab Kulu, Sikhim; Khásis Eup., & 48-52, \$\times\$ 58 millim.

1785. Eurois virens is an Agrotis near A accipiter, Feld.

1818 a Acronycta gastridia, Swinh A M N H (6) xv, p 6

Q. Differs from prumosa in the fore wing being longer, hind wing more uniformly suffused with fuscous and with indistinct discoccllular lunule; the margin white towards analangle. Under-

side of hind wing uniformly white, slightly irrorated with brown, the discocellular lunule prominent

Hab. Murree. Evp 42 millim

1829 a Prodenia synstictis, n sp

Differs from littoralis in the abdomen being white Fore wing with the markings on basal area less prominent, the antemedial line more regular, the orbicular and reniform stigmata narrower and forming a V-shaped mark by meeting on median nervure; the median nervules slightly streaked with white; hardly a trace of grey beyond the postmedial line, the submarginal line more regular, with dark points instead of streaks on its inner edge Hind wing pure white, without the dark marginal line.

Hab Nilgiris (Hampson); Ceylon (Pole) Exp 28-30 millim.

Type in B M.

1833 a Amyna apicalis, Moore, Lep Ath p 112, C & S no 2086 Hatta cupreipennis, Moore, Lep Ath p 112, C & S no 2090

A distinct species belonging to Sect. I without the vesicle in cell, apicalis being the brown form, cupreipennis the cupreous.

Hab China; Sikhim Exp, & 30, 2 32 millim

1835 Amyna monilis. Transfer to Eurois; the type is a female.

1838 a Callopistria variegata, Swinh Trans Ent Soc 1895, p 44

Q. Head, thorax, and fore wing varying from dark rufous to green and irrorated with black. Fore wing with the greater part of the medial area suffused with fuscous; some indistinct waved lines on basal area and similar postmedial and submarginal lines; two white spots beyond lower angle of cell, four on outer half of costa, and a dentate white line from costa before apex to vein 6 Abdomen and hind wing fuscous, the latter with more or less white at base. Underside grey, with black cell-spot and postmedial line.

Hab Bhután; Khásis, Ceylon Exp. 32 millim.

1839 α Callopistria guttulalis, n sp

d. Fore wing with the outer margin excised below apex and excurved at middle. Very pale rufous marked with dark brown, thorax and basal area of fore wing pencilled by dark edges to groups of scales, a large dark brown anal tuft. Fore wing with an ill-defined oblique dark subbasal streak, a medial dark line acutely angled to lower angle of cell, a large indistinct reniform spot, with the minutely dentate double postmedial line bent outwards round it; an indistinct minutely dentate pale submarginal line and some dark lumiles on margin; some pale specks on costa towards apex. Hind wing pale, with fuscous suffusion on outer area.

Hab. Ceylon (Pole) Exp 26 millim. Type in B. M.

- Genus Caradrina SECT I A, c Hind wing of male with veins 3, 4 stalked, a ridge of closely-set uptuined scales in cell and another on vein 1 b, inner margin with tufts of long hair
- 1874 a Caradrina lophophora, Hmpsn Trans. Ent Soc 1895, p 299
- d Differs from quadripunctata in having two white specks at end of cell of fore wing, the postmedial line excurved round end of cell

Hab Nágas Exp. 26 millim

- 1947 Nonagria fuscovirens = N (Isochlora) viridis, Staud. Rom. Mem. v, pp 88 & 161, pl viii, fig 9, which has precedence.

 Antenna of male bipectinate.
- Vol. II, p. 287 Physidomorpha=Rhangena, Moore, Lep. Ceyl. m, p 376 (1886)
- 1955. Insert Rhangena roseipennis, Moore, Lep. Ceyl m, p 375, pl 184, fig 12, C. & S no. 4735, which has precedence
- 1958. L. cygnus = Leocyma tubialis, Fubr Syst Ent p 578 = L diana, Guen Noct u, p 213; C & S no 1783
 Formosa, Tahiti, Tonga, New Caledonia.

1960 a Leocyma pilcheri, n sp

d. Head and thorax white above, black below; palpi and antennæ black, paired metallic blue-black spots on collar, meso-and metathorax, legs black ringed with white; abdomen fuscous. Fore wing white; three blue-black spots on basal half of costa and three on apical half, one joined to a large discocellular spot; a small round spot in cell, one on vein 1 near base; one antemedial and three postmedial conical spots on inner margin, a small spot on cilia below apex and another above outer angle. Hind wing fuscous, with marginal white band. Underside fuscous, the marginal and inner areas white; a white postmedial spot to fore wing and incomplete medial band to hind wing.

Hab Sikhim (Pilcher). Exp 36 millim Type in B. M.

1966-67 Diphthera vigens and D. pallida Antennæ of male with short branches.

1969 a. Perciana rectilineata, n sp

Q. Head, thorax, and fore wing dark brown with a purplish tinge, the last with oblique straight dark-edged ochreous ante-and postmedial lines, traces of a waved dark submarginal line, abdomen and hind wing fuscous.

Hab. Sikhim (Dudgeon) Exp. 30 millim Type in B M.

- 1969b Perciana fuscobrunnea, Hmpsn Trans Ent Soc 1895, p. 299.
- d. Head, thorax, and abdomen clothed with brown and fuscous scales. Fore wing brown, a large fuscous patch on basal half of

wing except on inner area, a waved black antemedial line; small tufts of black scales at middle and end of cell; a sinuous medial line bent inwards on median nervure, a fuscous apical patch defined by an oblique dark streak, a waved series of pale submarginal specks and marginal series of black lunules. Hind wing fuscous.

Hab. Bhután. Exp. 28 millim.

1977 a Bryophila obliquifascia, Hmpsn Trans Ent Soc 1895, p 299.

d. Grevish white with a green tinge, palpi fuscous at sides, the anal tuft ochreous. Fore wing with outwardly oblique black band with sinuous edges, terminating on vein 1 and bent outwards along it to join the crenulate submarginal line, which is excurved beyond cell and incurved below vein 2; a black spot at upper angle of cell with dark mark on costa above it, a black speck at lower angle of cell, a dark costal spot beyond the postmedial line, a marginal series of specks and spot above outer angle. Hind wing with indistinct discocellular dark lunule and highly curved postmedial line, both more distinct on underside.

Hab. Bhután Exp 32 millim

1991 a Erastria distigmata, n. sp

Fuscous brown with a cupreous tinge; vertex of head and end of 2nd joint of palpi pale, tarsi with pale rings. Fore wing with short white subbasal line from costa, an antemedial series of white specks arising from a short costal line, a white annulus at upper angle of cell and round spot at lower; a postmedial minutely waved white line prominent at costa and bent outwards beyond end of cell, a waved white submarginal line. Underside with the costal and outer areas of fore wing grey. Hind wing grey, with black discocellular lunule, prominent crenulate postmedial line, and obsolescent submarginal line.

Hab. Bhután, 2500 feet (Dudgeon) Exp 34 millim Type in B M

1991 b Erastria picta, n sp

Jet Pale red-brown; palpi at sides and patagia slightly marked with black. Fore wing with an olive tinge, the basal half of costal area fuscous, a sinuous dark antemedial line, bent outwards below cell, the orbicular, reniform, and claviform with bright pink scales on them; the area below end of cell suffused with black; a dark postmedial line angled outwards beyond end of cell, where there are a few pink scales on it, and inwards on vein 1, the area beyond it suffused with white, an oblique shade from apex and a diffused black submarginal line on medial area; cilia of both wings chequered black and white. Hind wing more ochreous, with traces of postmedial line, some dark scales on inner area and three dark marginal marks on median nervules.

Hab Khásis Exp 24 millim Type in B. M

- Vol. II, p. 304 Hyelopsis = Maliattha, Wlk Cat xxvn, p. 86 (1863), which has precedence. Type, M separata, Wlk.
- 1998. Hyelopsis renalis = Maliattha separata, Wile Cat. xxvii, p 86 Sikhim, Borneo
- 2023 a. Tarache eulepidea, n sp.
- Q Cretaceous white, head and thorax irrorated with brown and fuscous scales, abdomen tinged with ochreous, the 1st segment suffused with fuscous. Fore wing with the basal area irrorated with brown and a few black scales, a double sinuous antemedial black line almost obsolete except near inner margin, a double sinuous postmedial black line very much excurved between costa and vein 2, the area between the ante- and postmedial lines suffused with blue-grey, olive-brown, and black, and with a black O-shaped mark on disk, outer area with large brown patches beyond the postmedial line at costa and inner margins, and small patch beyond the bend, an irregularly sinuous white submarginal line, the margin and cilia blue-grey. Hind wing fuscous, the cilia pale

Hab Puttalam, Ceylon (Pole) Exp 22 millim Type in B. M.

2036 For "Berget Ins. Succ. 1, p 16" read "Inn Syst. Nat. i, 2, p 881"

2037 a Tarache nigritula, n sp

Q. Black-brown Fore wing with indistinct waved black and brown antemedial line, a yellowish-white speck in cell, a large yellowish-white patch just beyond middle, joined to the costa by three specks, an indistinct dentate black and brown postmedial line excurved round the white patch, a white speck on costa before apex; an indistinct waved submarginal line, the area beyond it variegated with brown and ochreous, a marginal series of black specks and an ochreous patch at outer angle. Hind wing fuscous

Hab. Sind (Nurse), Puttalam, Ceylon (Pole) Exp. 18 millim. Type in B M.

- 2049 a. Xanthoptera combusta, Hmpsn Trans Ent. Soc 1895, p 300
- Q. Ochreous, dark rufous, and fuscous, thorax mostly ochreous. Fore wing with the base dark; an ill-defined ochreous band before the diffused dark antemedial band, the medial area, except the costa and the disk, ochreous, with a dark spot on vein 2, an indistanct double sinuous postmedial line, a dark patch on outer margin from costa to vein 3, and a dark patch on inner margin from the postmedial line to outer margin. Hind wing with the basal two-thirds ochreous, suffused and irrorated with rufous; a sinuous antemedial line with discocellular annulus on it, the outer third dark rufous with indistanct sinuous submarginal line.

Hab. Bhután. Exp. 24 millim

SECT. III. Antennæ of male bipectinated, with short stiff branches

- 2054 a. Xanthoptera pectinicornis, Hmpsn Trans Ent. Soc 1895, p 300
- J. Head and thorax rufous; abdomen pale Forewing rufous brown slightly suffused with fuscous, the orbicular and remform represented by a few ochreous scales, a series of dark submarginal marks forming an indistinct line Hind wing pure white, the costal and apical areas tinged with fuscous

Hab. Calcutta, Ceylon Evp 18 millim.

2080 a Metachrostis metallica, n sp

Q Head and thorax black and chestnut-brown, abdomen black with pale rings. Fore wing with the basal area chestnut, with some black at base and a black antemedial line; the medial area black, with bands of leaden-grey suffusion on its edges, darkedged pale brown marks representing the orbicular and reniform; a pale brown and black minutely waved and curved postmedial line, outer area dark brown and black, with interrupted submarginal band of leaden suffusion, an ochreous marginal line; some pale specks on costa towards apex. Hind wing black-brown. Hab Ceylon (Pole). Exp. 22 millim. Type in B. M.

2080 b. Metachrostis albimarginata, n. sp.

Q. Pale ochreous irrorated with brown Fore wing with indistinct double sinuous antemedial brown line; the reniform with fuscous centre and black edge, and a diffused waved black line from its inner side to inner margin, the area beyond it purple-brown, the black postmedial line very oblique from costa to vein 6, then sinuous and at vein 4 incurved, the area beyond it white, with a black patch on costal half between the postmedial and sinuous fuscous submarginal line. Hind wing fuscous brown, with diffused fuscous submarginal line, the area beyond it whitish especially at apex; both wings with a marginal black line, cilia fuscous and white

Hab. Bhuj, Cutch (Nurse). Exp. 16 millim Type in P A.

- Genus Rivula Secr. II bis Mid tibize of male with very long scales on inner side, hind tibize fringed with spinous hair on outer side
- 2103 a. Rivula striatura, Swinh. Trans Ent Soc 1895, p 49, pl i, fig 10
- d. Pale brownish ochreous Fore wing with obscure brown streaks at base and on veins of outer area, a dark speck at end of cell, with oblique pale striga from costa above it, and oblique rufous-brown band from it to inner margin near base, an obliquely

2 L 2

waved postmedial line merging into a fuscous subapical patch; some pale strige on costa towards apex, a subapical black speck and marginal series of specks. Hind wing fuscous, the cilia rufous

2 with the markings bright rufous, hind wing darker. Hab. Khásis. Exp. 22 millim

- 2103 b. Rivula leucostacta, Swinh. Trans. Ent. Soc. 1895, p 49, pl 1, fig 1.
- o. Bright rufous Fore wing with basal white spot on costa; three oblique antemedial white spots, a medial white spot on costa, with a large spot below it at upper angle of cell, a post-medial irregular series of dark specks with white centres, and a submarginal regular series of similar specks. Hind wing fuscous, the cilia rufous.

Hab. Khásis; Ceylon. Exp. 24 millim.

- 2114. E. virginea = Eublemma ragusana, Freyer, New Beitr. v, p. 92, from Europe, which has precedence.
- 2130 a. Eublemma rubigmea, Hmpsn. Trans Ent Soc 1895, p. 300.
- c. Dark rufous; head and collar blackish. Fore wing with slightly waved ochreous antemedial line, two black specks on discocellulars, an ochreous postmedial line with white spot on it at costa, highly angled below costa, then straight and oblique, an indistinct ochreous submarginal line angled at vein 3, an ochreous line at base of cilia; four white specks on costa towards apex. Hind wing with straight ochreous medial line and traces of dentate submarginal line; a fine ochreous line at base of cilia.

Hab Bhután. Exp. 20 millim

2130 b. Eublemma reticulata, n. sp

2. Reddish brown suffused with grey. Fore wing with ante-medial grey line, highly angled below costa and sending a streak along subcostal nervire to join the grey postmedial line, which is outwardly oblique from costa to vein 6, then curved and running to middle of inner margin, a prominent round black discocellular spot, some pale strike on costa towards apex, with a dark spot below them; a minutely crenulate grey submarginal line, with black in its sinuation. Hind wing with faint traces of sinuous postmedial line and of submarginal series of black specks.

Hab. Ceylon (Pole). Exp. 18 millim. Type in R. M.

2130 c. Eublemma coccidiphaga, n sp

White suffused with pale purplish pink, head chestnut Fore wing with indistinct curved sinuous antemedial, medial, and postmedial lines arising from brown spots on the costa, the medial line enclosing a more or less developed dark discocellular spot;

the apical part of costa brown, with some white specks on it, a minutely dentate white submarginal line excurved at middle, and with some black specks on it below costa. Hind wing with a pale medial line, slightly excurved at middle; both wings with brown marginal line, the cilia purple at tips.

Some specimens have the medial area of both wings suffused with purple-brown except on costal area of fore wing, the disco-

cellular spot white.

Larva like the figure of the European E scitula, 'Insect Infe,' vi, i, p. 6, colour pinkish or greenish. Feeds on various species of Coccids such as Lecanium and Pulvinaria, living in a case formed of their remains, the case of the young being formed of a single scale to which additions are made as required, and having a four-sided valve at anterior end.

Hab Ceylon (Green, Pole) Eap. 24 millim. Type in B. M.

2131 a Eublemma acrapex, n sp

Q. Fuscous, thickly irrorated with grey Fore wing with the apex produced and acute, a pale sinuous antemedial line angled below costs, then inwardly oblique; a slight pale discocellular mark, a pale postmedial line, very much excurved from costs to vein 2, where it is angled, a dark patch on the costs with three white specks, an indistinct highly dentate submarginal pale line. Hind wing with indistinct sinuous postmedial and highly dentate submarginal lines

Hab. Ceylon (Pole). Exp 22 millim. Type in B. M.

2134 a. Troctoptera bisectalis, Wik Cat xvii, p 449; Moore, Lep Ceyl in, pl 179, fig 12, C & S no. 4403

Whitish, abdomen slightly tinged with pink and fuscous. Fore wing with pinkish patch near base from cell to inner margin; an antemedial black line outwardly oblique from costa to median nervure, then bent inwards, a prominent inwardly-oblique black medial band, with a speck before it in cell, one beyond it on costa, and two on discocellulars, a reddish patch on inner margin before outer angle, a marginal series of black specks. Hind wing with black antemedial line, with a pink and black patch beyond it and beyond end of cell bearing a white discocellular spot; a sinuous postmedial black line, the area beyond it purplish pink, with a black spot near anal angle, the cilia whitish.

Hab. Ceylon. Exp. 16 millim

2134b. Troctoptera deleta, Moore, Lep Ceyl. in, p. 304, pl. 179, fig 13, C. & S no 4404.

White, the thorax, abdomen, and fore wing suffused with pale yellow-brown, the last with traces of curved antemedial line; a black speck in cell; an oblique red-brown band across apical area not reaching outer margin, and usually with a dark spot at its

lower end and with traces of a pale line from it to inner margin; a pale line just inside the margin angled at vein 4. Hind wing with the apical and anal areas suffused with yellow-brown; traces of an antemedial brown line, two black discocellular specks; an indistinct sinuous brown postmedial line ending on outer margin above anal angle, and usually with more or less diffused black beyond its lower part.

Hab. Ceylon. Exp. 12 millim

Vol. II, p 344. Zagıra=Zurobata, Wik. Cat xxxiv, p 1276 Type, Z. rorata, Wik.

2135 a. Zurobata fissifascia, n. sp.

Q. Differs from wrecta in the thorax being rufous, with a grey band behind the collar; abdomen without grey basal band. Fore wing with the grey costal fascia not extending below the cell, terminating at its end and emitting slight streaks along subcostals and vein 5, met by an oblique streak from the apex, the highly angled postmedial line white, sharply defined, and not sinuous Hind wing with almost straight medial white line

Hab Ceylon (Pole) Exp. 22 millim Type in B. M.

2139 a. Zurobata plagiostola, n sp.

Q. Differs from reticulata in being dark red-brown; head and collar red-brown, abdomen with a white line on 1st segment. Fore wing with slight grey suffusion on basal and costal areas, one subbasal dark speck in cell, the postmedial line prominent, highly excurved beyond cell, and with an oblique white line from it to outer margin, met by a white line with three of the marginal black specks on it below apex. Hind wing with the postmedial grey line prominent, an indistinct waved submarginal line instead of the angled white line

Hab. Bhután (Dudgeon). Exp. 26 millim Type in B M.

2140. Zagıra multiguttata = Zurobata rorata, Wik. Cat. xxxiv, p. 1276; both generic and specific names having priority.

2144 a. Corgatha carnosa, Hmpsn Ill. Het 1x, p 150, pl 169, fig 9.

Q Flesh-pink, sparsely irrorated with fuscous, head and collar fulvous. Fore wing with the costs fulvous, a dark spot in cell and one at each angle, several oblique lines from below cell to inner margin, three oblique lines from apex to middle of inner margin, with a pale line between the two outer. Hind wing with these lines continued across it and situated on a more or less prominent band of brown suffusion, each wing with two dark submarginal lines, with a pale line between them, a pale line at base of cilia.

Hab. Ceylon. Exp. 22 millim.

- 2144 b Corgatha costipicta, Hmpsn. Trans. Ent. Soc. 1895, p. 300.
- Q Fuscous, head ferruginous, with white spot on vertex Fore wing with the costa fuscous and pink, with subbasal, antemedial, postmedial, and apical white spots. both wings with marginal series of dark specks. Underside with traces of curved dark postmedial line on each wing.

Hab. Sikhim. Exp. 16 millim.

2145. Corgatha costinotalis=C (Hyria) quadricostaria, Wlk. Cat xxii, p. 667, which has precedence Ceylon, Borneo

2145 α . Corgatha castanea, n sp

Chestnut Fore wing with indistinct antemedial and medial series of black specks, a postmedial series of black specks conjoined to an indistinct waved line highly angled below costa. Hind wing with ante- and postmedial series of specks; both wings with a prominent marginal series.

One specimen has the head black, some black on abdomen and basal half of costs of fore wing; a large patch on outer margin below apex, and some diffused black markings on anal area of hind wing, some white specks on ante- and postmedial lines of fore

wing and postmedial line of hind wing.

Hab Ceylon (Pole) Exp. 24-26 millim. Type in B M.

2146 a. Corgatha castaneiceps, n sp

Grey, irrorated with black and with a very slight rufous tinge; head and collar chestnut. Fore wing with black speck in cell, traces of a sinuous antemedial line angled below costa, a discocellular spot formed by black points, a postmedial brown line with pale outer edge excurved from costa to vein 3, a submarginal series of black specks. Hind wing with nearly straight brown medial line and submarginal series of black specks; outer area of both wings browner. Underside slightly suffused with pink

Hab Ceylon (Pole), Borneo. Exp. 20 millim Type in B. M.

Genus MIMORUZA.

Mimoruza, Hmpsn Trans Ent Soc 1895, p 301

Type, M nigriceps, Hmpsn.

Range Sikhim

Differs from Corgatha in the fore wing having no areole; veins 8, 9 stalked; 7 from cell Hind wing with veins 3, 4, and 6, 7 from angles of cell.

SECT. I. Fore wing with vein 10 from cell.

- 2147 a. Mimoraza nigriceps, Hmpsn. Trans. Ent. Soc 1895, p. 301
 - 2. Brownish ochreous irrorated with fuscous; head black

abdomen with black band on basal segment. Fore wing slightly



Fig 270 Mimoruza nigricops, Q. ‡

suffused wth fuscous, some black specks on costa; an obscure pale spot in end of cell, traces of minutely dentate antemedial, medial, postmedial, and submarginal lines; a marginal series of black specks. Hind wing with two black specks at end of cell, two nearly straight medial lines; some fuscous suffusion on outer

area; a marginal series of black specks

Hab. Sikhim. Exp 20 millim

SECT. II. Fore wing with vein 10 stalked with 8, 9.

2147 b. Mimoruza rosealis, n sp.

Q Head, thorax, and abdomen white; palpi and frons fulvous and black, wings white slightly suffused with pink, the outer margin excised below apex and angled at middle. Fore wing with traces of waved brown antemedial and medial lines, the latter with a black patch beyond it at lower angle of cell, and an olivebrown patch on inner area, a pink speck in cell and black speck on discocellulars, a triangular olive-brown patch on costa before apex, and a semicircular patch on apical half of outer margin, a series of black specks on margin. Hind wing pinker, with medial and curved postmedial ill-defined lines, a black speck at lower angle of cell, the margin and cella rufous

Hab. Bhutan (Dudgeon). Exp. 18 millim. Type in B. M.

2149. Oruza ruptifascia = 2154 O. lycaugesarra

2150 Oruza fiatercula = 2156. O. pallescens=0. (Phibalapteryx) hydrocampata, Guen Phal. 11, p 438; C & S no 3900, which has precedence, = Acidaha posticaria, Wlk Cat. xxxv, p 1633, from Australia.

2153. Oruza anisodoides == 0 (Lycauges) postvittata, Moore, Lep. Ceyl. ui, p 456, pl. 201, fig 12, C & S no 3757

Genus TROGACONTIA, nov

Type, T. albifrontata, Moore

Range Sikhim.

Q. Palpi with the 2nd joint clothed with hair and reaching beyond the short frontal tuft, the 3rd minute, antennæ cliated Fore wing with the apex acute, the outer margin excised from apex to vein 4 Veins 7, 8, 9, 10 stalked Hind wing with the outer margin slightly angled at vein 4, veins 3, 4, and 6, 7 from angle of cell.

2156 a. Trogacontia albifrontata, Moore, Lep Ath p 255, C & S no 3989.



Fig 271
Trogacontia albifrontata, Q ‡

Q. Pale rufous; the vertex of head white Fore wing with oblique ante- and postmedial lines, the costa and outer margin bright rufous; three white strige on costa beyond middle Hind wing with medial and marginal rufous lines; cilia of both wings white at tips.

Hab Sikhim. Exp 24 millim.

Genus MICRACONTIA

Micracontia, Hmpsn Trans Ent. Soc. 1895, p 301

Type, M batisella, Hmpsn.

Range Ceylon.

Palpi slender, porrect, and reaching beyond the frons; antennæ of male chated; tibiæ naked, with the spurs long. Fore wing with the apex somewhat produced; the outer margin rounded; vein 6 from well below upper angle of cell, 7 from the angle, 8, 9, 10 stalked. Hind wing with veins 3 and 4 from angle of cell.

2158 a. Micracontia batisella, Hmpsn Trans Ent Soc 1895, p. 302.

d. Dull olive-green with a rufous tinge, the vertex of head



Fig 272—Micracontia batisella, d. 🕴

and base of shaft of antennæ white. Fore wing with white speck on costa near base, large medial and postmedial pure white spots edged with red, and a similar spot at apex with red streak in centre, a large white patch at middle of inner area with red edge and round

red centre Hind wing with indistinct postmedial series of rededged white specks incurved below vein 2. Both wings with maculate black marginal line and the cilia ferruginous

Hab Ceylon Exp. 10 millim

2159 a. Micræschus albinellus, n sp

Q. Differs from elatarius in the ground-colour being pure white. Fore wing with a few pink scales, an ill-defined dark fascia from below costa near base to outer angle; the costa towards apex yellow with a dark speck on it, a dark band across apex and dark marginal band with series of crimson specks on its inner edge, cilia yellow, fuscous at middle. Hind wing with two waved crimson and yellow lines, a dark marginal band suffused with silvery blue and with a crimson band on its inner edge; the cilia yellow.

Hab. Ceylon (Green) Exp. 10 millim Type in B M

- 2174. Callyna, picta and the generic name Calymera must be referred to Carea, after albopurpurea, no. 2340, and will stand as Carea picta.
- 2180 a. Westermannia colisigna, Hmpsn Trans. Ent Soc. 1895, p 303
- Q. Differs from cornucopia in being grey without pink tinge. Fore wing with the comet-shaped mark extending up to the costa and its apex terminating on vein 1, its colour much browner, an elongate ochreous remiform spot on it with traces of a sinuous grey line beyond it; the indistinct submarginal line minutely dentate. Hind wing and underside greyer

Hab. Bhután. Exp. 30 milhm.

- 2186 a Brevipecten purpureotinctus, Hmpsn. Trans. Ent. Soc. 1895, p 303
- of. Head and thorax purplish fuscous, some of the scales tipped with grey; palpi white in front, abdomen fuscous brown. Fore wing with the basal half rufous brown, slightly tinged with fuscous at base and on inner margin, a fine oblique slightly sinuous antemedial line; the outer half suffused with purplish fuscous, bounded on inner side by a black-brown triangular mark from costa to lower angle of cell, below which is a crescentic mark with its hollow towards outer margin, then a curved line to miner margin; a fine sinuous postmedial line bent inwards at vein 2 and joining the medial markings at inner margin, a truncate triangular black-brown mark on costa before apex. Hind wing fuscous with a rufous tinge; the chia white in parts, underside with the inner half hoary.

Hab. Simla. Exp. 32 millim.

- 2186 b. Brevipecten cosmiodes, Hmpsn. Trans Ent. Soc 1895, p. 304.
- Q. Reddish brown, irrorated with black and with a slight purple tange. Fore wing with outwardly oblique antemedial and medial brown lines, with the orbicular between them; the remform fuscous; fuscous suffusion on costal area from medial line to apex, a postmedial brown line highly angled at vein 5, then inwardly oblique and almost touching the medial line at inner margin; an indistinct waved submarginal line and fine marginal line. Abdomen and hind wing fuscous, the latter with the clina greyish. Underside fuscous suffused with grey, both wings with indistinct ante- and postmedial curved lines.

Hab. Bhután; Ceylon. Ecp. 34 millim.

Genus METAPTYA, nov.

Type, M. sericea, Hmpsn. Range. Ceylon.

Palpi upturned, smooth, slender, and reaching just above vertex

of head; antennæ of male cliated; thorax with a slight crest behind collar and a long sharp crest on metathorax; abdomen with a large dorsal tuft on 2nd segment; mid tibiæ fringed with hair; hind tibiæ with a slight terminal tuft. Fore wing with the costal and inner margins arched; the outer margin very slightly angled at vein 4, veins 9 and 10 anastomosing with 8, which is given off from 7 to form the arcole. Hind wing with vein 5 from just above angle of cell, a fan of large thick scales at anal angle. Betinaculum in male bar-shaped

2186 a. Metaptya sericea, n. sp

d. Pale grey-brown slightly irrorated with fuscous Fore



Fig 273 — Metaptya sericea, o

wing with curved anteand postmedial fuscous lines, the latter with pale outer edge, a dark discocellular speck, an indistinct sinuous fuscous submarginal line, the apex with slight rufous tinge. Hind wing paler, the apical area slightly

tinged with fuscous, a fuscous mark with white speck on it above the tuft at anal angle

Hab Ceylon (Pole) Exp. 22 millim Type in B. M

2187 a. Doranaga soliera, Swinh A. M N H (6) xv, p 7

d. Differs from leucospila in the oblique line being obsolescent except that the portion retracted to costs is white, the spical white patch obsolete and replaced by white suffusion which extends over the whole outer area. Hind wing ochreous, suffused with fuscous on outer area.

Hab. Khásis Exp 24 millim

Genus ANODONTODES.

Anodontodes, Hmpsn Trans Ent Soc 1895, p 302

Type, A rotunda, Hmpsn.

Range Sikhim

- Q. Palpi slender, porrect, and reaching beyond the frons; antennæ ciliated, eyes naked; thorax and abdomen smoothly scaled, tibiæ hairy. Fore wing with the apex rounded; the inner and outer margins forming a continuous curve. Hind wing with vein 5 from above angle of cell
- 2191 a Anodontodes rotunda, Hmpsn Trans Ent Soc 1895, p 302.
- Q. Head, thorax, and abdomen chestnut; the tegulæ reddish ochreous. Fore wing reddish ochreous; the costa and apex suffused with fuscous; traces of antemedial, medial, and two

postmedial obliquely curved and slightly waved lines, a dark patch



Fig 274—Anodontodes rotunda, Q

inside the first below the median nervure, the reniform indistinct with a dark patch beyond it; the outer margin fuscous and chestnut, with a waved blue-grey line on it. Hindwingfuscous Underside suffused with fuscous; each wing with cell-spot and two indistinct postmedial lines.

Hab Sikhim. Ewp. 46 millim.

2193 a Homodes fulva, n sp

of. Fulvous with a purplish tinge. Fore wing with the basal area irrorated with silvery purple scales; silvery purple sinuous antemedial, medial, and postmedial lines, the last excurved beyond cell, and with an indistinct dark line beyond it; a submarginal series of silvery purple spots with a tawny band inside them, a tawny marginal band, with a double series of fine black marginal strime. Hind wing with straight antemedial and medial bands, the markings of outer area as on fore wing

Hab Ceylon (Pole); Borneo. Exp. 24-30 millim. Type in B. M.

2195 a Gadirtha pulchra, Butl. Trans Ent Soc. 1886, p 412.

Grey, collar with a narrow black line, patagia and metathorax tapped with black; abdomen with black lunule on terminal segment. Fore wing striated with fuscous and variegated with pale olive, and in cell with pale pink; a prominent nearly straight antemedial black line with industrict irregular line on its outer edge; orbicular large and obscure; reniform large, black-edged, with brown lunule at centre and dark costal mark above it; a prominent black postmedial line from costa to outer margin at vein 1, along which it is retracted, and reaches inner margin beyond middle and almost joined by a short oblique band from costa to vein 7. Hind wing white, the veins towards margin and marginal area, especially at apex, fuscous.

Hab. Ceylon, Australia. Emp 52 millim.

2199. Plotheia celtis; & differs from the Q in the thorax and fore wing being much darker.

2199 a †Plothera stigmatophora, Hmpsn. Trans Ent. Soc. 1895, p 305

d Differs from celts in the fore wing being without the two raised tufts of scales between postmedial line and outer angle. Hind wing suffused with fuscous brown, the inner area expanding into a large folded lobe containing a tuft of long hair; underside

• † Described (Vol II, p 370) as the male of celtus

with a large black-brown patch below median nervure from near base to inner margin.

Hab. Sikhim Exp. 22 millim.

2203 a. Plotheia nigralba, Hmpsn Trans. Ent. Soc 1895, p 305

& Fuscous black Fore wing with large white patches at middle of costa and just before apex, enclosing black spots on the costa; indistinct waved subbasal, antemedial, postmedial, and submarginal black lines; a marginal series of grey specks

Hab. Bhután. Exp. 26 millim.

Genus Barasa—Seor II Fore wing with vein 7 from beyond the areole; male with no tuft of hair from vein 1.

2218 a. Barasa alopha, n. sp

Differs from acronyctoides in the antemedial line of fore wing being nearer the base and curved, the postmedial line nearer the base, angled inwards below the cell and outwards on vein 1

Hab Tanna, Bombay; Puttalam, Ceylon (Pole). Exp. 24 millim.

Type in B M

2218 b. Barasa costalis, Dudgeon, Hmpsn Trans Ent. Soc 1895, p 305.

White, slightly tinged with fuscous, palpi with the 2nd joint black at sides. Fore wing with short fuscous subbasal line; fine waved antemedial line, spot in cell, double waved medial line; irregularly dentate postmedial and submarginal lines ending close together near outer angle, a slight fuscous shade inside the margin; black specks on costa at origin of lines. Hind wing pale fuscous, underside of fore wing darker fuscous.

Hab Sikhim, Bhutan Erp. 26 millim.

2218 c. Barasa floccifera, n. sp

d. Greyish white suffused with brown Fore wing irrorated with a few black scales; a short black bar from base of costa, tufts of raised scales on the traces of antemedial line, in end of cell, and on the faint postmedial line, which is incurved from vein 4 to inner margin. Hind wing with some brownish hair on base of inner area, underside with indistinct sinuous postmedial line.

Hab. Bhután (Dudgeon). Exp 26 millim Type in B. M.

2222 a Blenina minor, n sp.

Q. Head and thorax white and fuscous, palpi banded with fuscous, abdomen tinged with fuscous. Fore wing white, irrorated with a few black scales, the inner area near base and beyond middle irrorated with olive scales, a quadrate fuscous patch near base of costa; sinuous ante- and postmedial black lines, with a quadrate fuscous patch between them on costa diffused down to vein 1; a black discocellular spot, the postmedial line arising from a fuscous

1

costal patch; an irregularly sinuous submarginal line, a fuscous patch on outer margin below apex. Hind wing pale fuscous Hab. Udagama, Ceylon (Mackwood). Exp. 26 millim. Type

in B. M.

2222 b. Blenina xantholopha, n sp

6. Head and thorax grey irrorated with brown; palpi black at sides, collar edged with black, abdomen pale at base, the medial part fuscous, the extremity grey. Fore wing grey irrorated with brown; small sulphur-yellow tufts below base of median nervure, and on the small black-edged orbicular and at lower end of the large reniform, an obscure waved black subbasal line, a dentate black antemedial line becoming broad below the cell, the area before it tinged with rufous; a highly dentate irregular medial line; a postmedial dentate line excurved beyond cell and crossed by a pale brown line; a very irregularly dentate submarginal black line with white patch on it at costa; the veins streaked with black just inside margin; the costal and apical part of onter area tinged with rufous. Hind wing pale at base, the outer half suffused with black

Hab. Khásis. Eap 38 millim. Type in B. M.

SECT. I. B.—Hind wing of male with the area near anal angle contorted and with tufts of long hair above and below; the veins beyond lower angle of cell and vein 6 fringed above with hair, veins 3, 4 on a long stalk in male, coincident in female.

2222 c Blenma metalophota, n. sp

Differs from minor in the abdomen being fuscous and fringed with white towards extremity. Fore wing with no definite fuscous patch between the ante- and postmedial lines, the latter recurved to costa, a marginal series of black specks. Hind wing paler and semilyaline; the tufts of hair in male fuscous and ochrous.

Hab Khasis Exp. 36 millim. Type in B. M.

- Vol. 11, p. 380. Argyrothrypa=Ptisciana, Wik. Cat xxxii, p. 912 (1865).
- 2225. Argyrothripa blacına = Ptisciana seminivea, Wik Cat xxxin, p 912 Borneo.
- 2226 a Ptisciana olivana, Swinh. A. M. N. H (6) xvii, p 362
- o. Dark olive-green, head grey. Fore wing with traces of waved lines on basal area and of a rufous antemedial band from costa to below cell; a white discocellular line; a semicircular dark purplish patch occupying most of outer area, crossed by two curved lines with dark-red suffusion on their outer side, and by a dentate submarginal line with a black speck on it below apex. Abdomen and hind wing black-brown. Underside black-brown; the costa of fore wing pale.

Hab. Khásis. Exp. 28 millim.

2232 a Ptisciana niphea, n. sp

Q'. Head and thorax pure white, abdomen with an ochreous tinge. Fore wing pure white; a small triangular black subbasal spot on costa with traces of a waved line from it, beyond which are short black streaks in and below cell, traces of a medial waved line, with a fuscous patch beyond it on inner margin; a pale olive-green waved line from before middle of costa to beyond lower angle of cell, then becoming erect, a large fuscous postmedial patch from costa to vein 5, with a tridentate black mark beyond it on the irregular obsolescent submarginal line, which emits two black teeth on veins 2 and 3; a black patch on margin below apex. Hind wing tinged with fuscous towards margin.

Hab. Ceylon (Pole) Evp 20 millim. Type in B M

2232 b. Ptisciana lichenosa, n sp

3. Head and thorax white; palpi with rufous and black scales at sides, collar tinged with green; abdomen fuscous. Fore wing with black-edged green patch at base of costa, the basal half white tinged with green, bounded by a waved oblique black line, the outer half reddish brown irrorated with black; a waved postmedial line angled on vein 6, an obscure waved submarginal line; a white apical patch. Hind wing pale suffused with fuscous, especially on apical area.

Hab Khásis. Exp. 24 millim Type in B M

Genus DENDROTHRIPA, nov

Type, D rufipuncia, Hmpsn Range Kángra, Ceylon

Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed; antennæ of male chated, abdomen without dorsal tufts. Fore wing with the apex rectangular, veins 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 stalked, 5 absent

2236 a Dendrothripa rufipuncta, n sp

d Greyish brown Fore wing with two somewhat irregular fine black antemedial lines, the area between them somewhat



Fig 275
Dendrothripa rufipuncta, & }

paler, a rufous spot at lower angle of cell, with a tuft of scales below it and an oblique black striga from costa above vein 2; an indistinct minutely dentate postmedial line excurved beyond cell, bent inwards, and with a rufous spot in its sinus below vein 2, traces of a submarginal minutely-dentate black line; a

marginal series of black specks Hind wing whitish, suffused with brown towards margin, the cilia ochreous

Hab. Kangra (Hocking) Evp 20 millim Type in B M.

2236 b. Dendrothripa atrifasciata, n sp

Q. Pale grey-brown Fore wing with deep black fascia from base of costs along median nervure and expanding at lower angle of cell; indistinct pale ante- and postmedial lines, the latter excurved beyond cell Hind wing whitish.

Hab. Nawalapitiya, Ceylon (Pole). Exp. 16 millim. Type in B.M.

2242. Clettharra vitea must be placed in a new genus -

Genus LOPHOTHRIPA, nov.

Type, L vitea, Swinh.

Range. E. Himalayas. Bombay, Ceylon.

Palpi upturned, the 3rd joint long; from with a tuft of scales, antennæ simple, metathorax and abdomen with large dorsal tuits



Fig 276 - Lophothrepa vitea, c. 1.

of scales. Fore wing with transverse ridges of scales; veins 8 and 9 anastomosing to form a long areole. Hind wing with veins 3, 4 stalked, 5 present.

Allied to Chlumetra, one specimen has the basal area of fore

wing ferruginous.

2249. Clettharra flocafera is the 3 of 2237, C. valida

2253 a Sarrothripa chlorana, n sp.

d. Head and thorax dark green, abdomen black, with three white dorsal tufts towards base. Fore wing dark green irrorated with black, forming a broad diffused medial fascia, the medial part of which is mixed with rufous and white scales, an obscure white subbasal line running out to an acute angle below cell, where it is connected by a streak with the postmedial white line which arises from costa before middle, runs out to an acute angle beyond cell and is then dentate to inner margin, a ferruginous patch at outer angle mixed with white scales on its inner side, and with a minutely dentate line above it just inside the margin, becoming obsolescent towards costa. Hind wing fuscous black.

Hab Sikhim (Dudgeon) Exp. 24 millim. Type in B M.

Vol. II, p.388 Under Ingura meert Callingura, Butl. Entom. 1894, p 284, for Sect. II. B

2258 a. Eutelia picticolor, n sp

Head ochreous, thorax black variegated with green, abdomen black and brown
Fore wing with the basal area black variegated

with green and brown and crossed by subbasal and antemedial brown lines, the outer balf green variegated with pinkish, brown, and fuscous, and crossed by several indistinct lines, a prominent claviform black mark filled-in with brown beyond the cell; the postmedial line angled outwards beyond it, and with a white spot on fuscous patch beyond it on vein 3; a blackish patch on costa before apex and on outer margin below apex. Hind wing dark red-brown; the cilia and some marks near anal angle rufous. Underside fuscous and pale ochreous, variegated on outer area with rufous, hind wing with discocellular spot and four waved lines.

Hab. Nilgiris; Ceylon (Pole). Exp, & 22, Q 26 millim

Type in B. M

2258 b. Eutelia stictoprocta, Hmpsn. Trans Ent. Soc. 1895, p. 304.

segment and another on anal flap. Fore wing with the basal area rather darker, except on costal area which is pale; faint traces of numerous waved oblique lines, the elongate remform with pale edge and dark centre, traces of the triangular mark on costa before apex. Hind wing with the base pale; the outer area fuscous brown, with a pale mark at anal angle. Underside with the black discocellular lunule very prominent; traces of a minutely dentate postmedial line, some dark and pale marks on inner area near anal angle.

Hab. Sikhim. Exp. 30 millim.

2269 a. Eutelia viridinota, Swinh. Trans Ent. Soc 1895, p. 52

3 Reddish brown. Fore wing with the reniform pale green and conjoined to a pale spot on costa, traces of numerous waved lines, of which the most distinct are postmedial and submarginal lines, the former angled at vein 5; a pale-edged chocolate-brown spot on costa before apex. Hind wing fuscous with the base pale; slight dark marks on inner margin above anal angle

Hab Sikhim; Khásis. Exp 34 millim.

2281 a Risoba flavipennis, Hmpsn Trans Ent Soc 1895, p 304

Fore wing with vein 7 from beyond the areole.

Q. Head and thorax orange-yellow; palpi fuscous; antennæ brownish; abdomen pale Fore wing orange-yellow, very slightly irrorated with dark scales; a dark speck in cell and two on discocellulars, traces of a pale medial line and curved postmedial line; two grey patches on outer margin above and below middle, irrorated and edged with brown. Hind wing yellowish white, with marginal grey-speckled fuscous band not reaching anal angle

Hab. Bhután. Exp. 38 millim.

2289 Stictoptera chalybea, Butl, will stand for the species, as S. albodentata is a synonym of 2294, Gyrtona hylusalis vol. iv. 2 m

Vol. II, p. 416. Read Ectogonitis for Goniocraspidum, which is preoccupied.

2322 a. Churia viridipicta, n. sp

Grey-brown; vertex of head and collar yellow-green. Fore wing irrorated with black; ante- and postmedial waved fuscous lines; some yellow-green on base of costa and middle of inner area; irregular patches on postmedial line sending off a spur towards apex; a dark discocellular speck; submarginal and marginal series of black specks. Hind wing fuscous.

Hab. Khásis. Evp. 32 millim. Type in B.M.

2336 a Carea albirufa, n sp.

d. Differs from purpures in the head, thorax, and fore wing being bright brick-red; abdomen, white suffused with fuscous, the extremity pink. Hind wing pure white; the apical part of margin pink. Underside white, the apical area of both wings pink.

Hab. Puttalam, Ceylon (Pole). Emp. 30 millim. Type in

B. M.

2340 a. Carea rectimarginata, n. sp.

Fore wing with the apex acute, the outer margin straight.

o. Head and thorax pale brown, with paired rufous dorsal fasme; abdomen pale with a fuscous tinge. Fore wing pale brown irrorated with black, and with an olive tinge on costal area; a rufous fascia on inner margin; a black discocellular speck. Hind wing pale, the inner area suffused with fuscous. Underside irrorated with black and with black discocellular spot to each wing; fore wing with subcostal fuscous fascia.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 36 millim. Type in

B. M.

P. 427. Bears has the antennæ bipectinate in male for half their length.

2357 a Trisula dudgeoni, n. sp.

Q. Head, thorax, and abdomen variegated with buff-brown and black scales. Fore wing with the basal area buff, with velvety-black patches on costa and inner area and a streak on median nervure, and bounded by a waved black line; the rest of the wing leaden grey; an ochreous stigma in end of cell; pink suffusion on medial area below cell; a highly dentate black postmedial line on a brown ground, and with an oblique diffused black band inside its costal half; a pale-edged black submarginal line, angled inwards at vein 5. Hind wing fuscous and grey, with traces of discoccilular lumile and postmedial and submarginal lines, which are more distinct on underside.

Hab. Bhután (Dudgeon). Exp. 56 millim. Type in B.M.

- 2363. Insert (syn) Catocala pudica, Moore, 2nd Yarkand Mission, Lep p. 12; C. & S., no. 2281. Ladákh.
- Vol. II, p. 446. Under Sypna insert Daddala, Wlk. Cat. xxxii, p. 974 (1865).
- 2385 a. Sypna quadrisignata, Wlk Cat xxxui, p. 974, Waterhouse, Aid. 11, pl 160, fig 5

=replicata, Feld, =apicalis, Butl, =plana, Moore, =floccosa, Moore.

Differs from 2386, which must stand as Sypna lucilla, Butl., = obscurata, Butl., = renisigna, Moore, in the antennæ of male being fasciculate and the hind wing having the apex broadly ochreous. The two species have similar range of variation.

- 2394 a. Hypocala holcona, Swinh A. M. N. H (6) xv, p 9
- Q. Differs from biarcuata in the black submarginal line being entirely obsolete.

Hab. Andamans Exp. 40 millim.

2402. Nyctipao hieroglyphica. The male stridulates loudly in flight, and the abortion of the large glandular scent-organ of the hind wing is probably in connection with the development of this habit

Before 2405 insert:-

- "SECT. III. Male with no glandular patch or abortion of costal area of hind wing."
- 2406. Nyctipao gemmans. Insert (syn) Nyctipao ophristigmaris, Hmpsn. Trans. Ent Soc. 1895, p 305.
- J. The white submarginal band of both wings replaced by an obscure ochreous line and bidentate white patch on costs of fore wing.

Hab. Bhután. Exp. 76 millim.

- 2408 a. Nyctipao jaintiana, Swinh. A. M. N. H. (6) xvii, p. 362, is the form with the white postmedial line from the Khásis and Jaintia Hills, and is probably a distinct species.
- 2419 a. Polydesma glenura, Swinh A M N H (6) xv, p 10; id Trans Ent Soc 1895, pl 1, fig 4
- d. Head, thorax, and abdomen yellowish brown, with a few darker brown scales. Fore wing suffused with fuscous brown, leaving the inner area and a diffused oblique submarginal band from apex ochreous brown; somewhat indistinct double waved subbasal and antemedial lines filled-in with ochreous; the orbicular and reniform large and ochreous, the former oblique and oval, the latter with a blackish lunule on it expanding on lower

portion; an indistinct double minutely waved postmedial line excurved beyond cell; some pale specks on costs towards apex, an irregularly dentate and sinuous submarginal pale line, with some dark dentate marks on its inner edge; cilia rufous. Hind wing fuscous, the cilia pale; underside with discocellular spot. Hab. Khásis. Exp. 50 millim.

2429 a. Polydesma fraterna, Moore, is a small grey-brown form, which may be a distinct species; male with a rounded lobe on inner margin of fore wing.

Hab. Khasis; Bombay; Nilgiris; Ceylon; Australia. Exp.

48 millim.

2431 a. Polydesma virens, Butl Trans. Ent. Soc 1881, p. 192

Differs from biforms in the thorax being mostly brown. Forewing with the green areas irrorated with black; an irregularly waved antemedial black line beyond the subbasal red-brown patch, and an irregularly dentate curved line inside the postmedial red-brown markings, which are continuous; the medial line almost obsolete; some subapical black streaks. Hind wing darker at base, with irregularly sinuous postmedial line.

Hab. Japan; Sikhim. Exp. 48 millim.

2439. Polydesma terminigera. Male with tuft of raised scales on fore wing at base of costa and an oblique flap of raised scales from middle of costa across end of cell. Bhután

2450 a. Melipotis heliothidia, n sp.

d. Head, thorax, and abdomen white; palpi and metathorax tinged with brown, abdomen with dorsal fuscous bands and two pairs of lateral black spots. Fore wing grey irrorated with rufous; the inner margin whitish; sinuous subbasal and antemedial indistinct brown lines, the latter with some blackish marks inside it; orbicular and remitorm white-edged, the latter obscured by a diffused blackish patch extending to the costa, a postmedial minutely dentate rufous line incurved at vein 3; a submarginal series of prominent dentate black and white spots and a series of marginal black lunules. Himd wing white, with large black discocellular spot; an irregular submarginal black band interrupted at vein 2 and diffused outwards along the veins to the marginal series of black lunules. Underside of both wings with large black discocellular spots.

Hab. Bhuj, Cutch (Nurse). Exp. 36 millim Type in B. M.

2453 a. Lyncestis metaleuca, n sp.

5. Differs from amphex in the hind wing having no marginal band; a few marginal specks and the veins fuscous towards apex.

Hab. Bhu, Cutch (Nurse). Exp. 31 millim Type in B. M.

533

Vol II, p 481. Under Catephia insert Premusia, Wlk. Cat. xv, p 1780 (1858)

2464 a Catephia lichenea, Hmpsn Trans Ent. Soc 1895, p 306

Q. Head, thorax, and abdomen pale brown on vertex, blackish at sides. Fore wing verditer-green suffused with leaden grey; the inner area pale brown, the orbicular small and brownish, the reinform indistinct, with dark edge, traces of numerous waved lines, of which the most distinct is the dark dentate postmedial line and the submarginal line which has some dark dentate marks on it, a marginal series of black specks. Hind wing with the base white, the outer two-thirds black, chia pale brown. Underside with the basal area whitish, hind wing with black discocellular spot

Hab Bhután Exp 38 millim.

D. (Premusia) Palpr of male with the 3rd joint recurved over head, hollowed-out on inner side, and enclosing tufts of long hair, the tibic with immense tufts and inner margin of hind wing clothed with long hair

2465 a Catephia intrahens, Will Cat xv, p 1780

Head and thorax pale brown and black; abdomen pale brown. Fore wing rufous and blackish brown, a basal green spot, a small quadrate black spot in cell with the rufous orbicular beyond it, a broad postmedial blackish band with waved green edges, its outer edge toothed at vein 4, its inner edge with green band inside it, at vein 2 it is retracted to median nervure and expands into a large patch occupying the whole medial area below the cell; a rufous band beyond the blackish band, with traces of a crenulate dark line on its outer edge. Hind wing with the basal half white; the outer half black. Underside with the basal half of wings whitish, with black discocellular spots.

Hab Bhután, Borneo Evp 46 millim

2537=1777, see p 510.

2538 The figure represents a new species from the Khasis, which hardly differs from polyspila except in the pectinate antenna—2538 a. Baniana pectinata, n. sp.

Vol. II, p 516 Borsippa=Bocula, Guen Noct iii. p 295 (1852), for Sect. III. Type, B. caradrinoides, Guen.

2543 a Bocula orthosiana=punctilineata=diffica (Hab. Assam; Burma; Bombay, Nilgiris), which is represented in the figure. belongs to Group A, and is distinct from the more ochreous pallens=marginata from Bengal, Bombay, and Ceylon, with the sexual characters in the male as described.

2546 a. Bocula caradrinoides, Guen Noct. ii, p 298

Red-brown. Fore wing with fine oblique slightly sinuous antemedial, medial, and postmedial lines; a black speck in cell, and round discocellular spot sometimes reduced to a black and ochreous speck; a slightly curved ochreous submarginal line with dark outer edge; a prominent marginal series of dark and ochreous specks. Hind wing duller brown; underside with cell-spot

Hab. Ceylon; Java. Exp. 34 millim

2552 a. Plecoptera ferrilineata, Swink MS

Q. Leaden grey; the head and collar ferruginous. Fore wing with the medial area irrorated with black scales; an antemedial slightly oblique minutely dentate ferruginous line; the orbicular and remiform dull ferruginous; an obscure medial line highly angled below costs; a diffused postmedial band with dark specks on its outer edge; a marginal series of black specks. Hind wing fuseons; calla of both wings brown.

Hab. Khásis. Exp. 32 millim.

2552 b. Plecoptera holostoma, Swinh A. M. N. H. (6) xv, p. 10.

Palpı with the 3rd joint long and reaching far above vertex of head.

d. Differs from luteiceps in being grey-brown; head and collar black. Fore wing with the costs ochreous, the ante- and post-medial lines edged with ochreous, the latter further from the remform and obtusely angled, an indistinct lumilate submarginal line. Hind wing with indistinct medial line; both wings with ochreous line at base of cilia. Underside dark.

Hab. Bhután, Khásis. Exp 32 millim.

2591 a. Thermesia sthenoptera, Swinh A. M N H (6) xv, p. 12.

Antennæ with the bristles arising from serrations.

d. Purplish fuscous. Fore wing narrow, with ochreous specks in and at end of cell; traces of waved antemedial line and oblique straight medial line, more prominent crenulate postmedial and submarginal lines. Hind wing with crenulate curved medial line on a diffused rufous patch; a submarginal series of white specks. Underside irrorated with white.

Hab Khásis. Exp. 30 millim.

- 2605. Insert Ischyja ferrifracta, Wllc. Journ. Linn. Soc. vii., p. 177; which has precedence
- 2618. Bematha extensa is found in Bhutan and North Borneo.

2642. Insert (syn.) Adres sikhimensis, Butl. A. M. N. H. (6) xv, p. 126; the Sikhim form described in the text.

Genus BASILODES.

Basilodes, Guen Noct 11, p 358 (1852)

Type, B pepita, Guen, from N. America.

Range Nearctic Region, Bombay

Palpi straight and porrect, the 2nd joint fringed with hair above, the 3rd hairy, reaching well beyond the frons, which has a large rounded prominence hollowed out in front; antennæ thickened and flattened, metathorax with thick tufts of hair, tabiæ slightly hairy; abdomen without dorsal tufts. Fore wing broad, the costa moderately arched, the apex more or less produced; the outer margin excurved at middle; the inner margin lobed near base and slightly at outer angle, the arcole very short, vein 5 of each wing from well above angle of cell.

- 2689 a. Basilodes chrysosticta, Hmpsn Trans Ent Soc 1895, p. 306
- Q. Violaceous grey. Fore wing with short subbasal black line from costa, sinuous antemedial and very highly excurved medial lines, terminating in a pale golden-yellow patch extending from cell to inner margin, irrorated with ferruginous and crossed by the double waved ante- and postmedial lines and the single medial



Fig 277.—Basilodes chrysosticia, Q

line; the double waved postmedial line arises from the costa near the apex, below which it crosses a yellow patch and has three white spots on its outer edge, beyond which is a dark submarginal line bent inwards at vein 3, and a single marginal white spot below the apex. Hind wing with a fuscous tinge, whitish on underside

Hab. Bombay Exp. 42 millim

2697 a. Calesia proxantha, Hmpsn Trans Ent Soc 1895, p 306

Hind wing of male with a hyaline streak between the bases of veins 2 and 3, which are bent, and vein 3 shortly stalked with 4

o. Head and collar orange; the 3rd joint of palpi black; antennæ fuscous, legs orange, with black spots at end of tibue, thorax and wings uniform silky mouse-colour; abdomen scarlet.

Hab Kalewa, Upper Burma Exp. 36 millim.

2706 a. Mecodina ferrugineiceps, n sp

6. Very dark brown irrorated with blue-grey, head and collar ferruginous. Fore wing with the base of costal area ferruginous; traces of an antemedial line, a white discocellular line, a sinuous white postmedial line bent inwards to costa and with a non-irrorated band inside it; a dark quadrate patch on costa before apex with ferruginous spot below it. Hind wing with sinuous white medial line; a lumilate rufous submarginal line angled at middle.

Hab Bhután, 2500 feet (Dudgeon). Exp 30 millim Type in B. M.

- Vol. III, p. 8. The figure 4 represents 2725, Zethes perturbans, Wik.
- 2720. Insert (syn) Sanys flexus, Moore, Lep. Atk. p 175, C. & S. no. 2764.
- 2722 = Saraca pannosa, Moore, Lep Atk. p. 182; C & S. no 2724.

2723 a. Zethes apicinota, n. sp

Dark brown and grey, sometimes with a slight rufous tange. Fore wing with an indistinct waved antemedial line, a postmedial pale line sharply angled beyond cell, then incurved and with diffused fuscous on its inner edge; a pale-edged quadrate dark patch on costa before apex, with three white costal specks on it and with a pale-edged black speck below it. Hind wing with discocellular speck; a pale medial line with a diffused fuscous band on its inner edge and series of pale-edged dentate black marks beyond it, the one above middle large and triangular, both wings with dark marginal line. Underside of both wings with traces of medial and submarginal lines and a minutely waved grey medial line.

Hab. Bhután (Dudgeon), Borneo, Java. Exp. 26 millim. Type in B. M.

2725. Omit Saraca pannosa, Moore, from synonymy.

2734. Refer Z. costalis to beginning of Egnasia.

2739 a. Zethes rufipennis, Hmpsn. Trans Ent Soc 1895, p 307.

of. Ferruginous red; palpi dark, a dark tuft on 1st abdominal segment. Fore wing with slightly darker subbasal band edged by waved pale and dark lines; an irregularly dentate dark antemedial line; the remiform large, otherous and with dark edges; a double postmedial line highly angled on vein 4 and sending a dark streak from that point to the angle of outer margin, a grey patch

below costa and indistinct crenulate line beyond the double lines; a series of dark specks just inside the margin. Hind wing with discocellular black speck, a double dark postmedial line, with indistinct irregularly crenulate line beyond it, a series of dark specks just inside the margin. Underside greyish

Hab Bhután Exp. 40 millim.

2742 Z ocellata. Refer to Egnasia next 2751, E tripuncta.

2744 a Egnasia ruficeps, n sp.

d Palpi bright rufous, vertex of head pale, thorax and abdomen grey-brown, the anal tuft ochreous. Fore wing grey-brown and fuscous irrorated with black, slight rufous suffusion near base, an oblique bright rufous sinuous antemedial line from below costa; traces of a sinuous fuscous medial line; an obscure brown and black discocellular lunule, a large pale-edged dark postmedial triangular patch with three pale costal specks on it, the irregularly dentate oblique postmedial line from its apex to inner margin, and the submarginal line from its outer side and angled on vein 4, the inner half of outer area suffused with rufous, a series of dark marginal specks inside apical part of margin and a fine crenulate marginal line. Hind wing rufous irrorated with black, an indistinct dentate postmedial line and two black spots near anal angle.

Hab. Ceylon (Pole) Exp 38 millim. Type in B. M.

Vol III, p 19. Hyperlopha has vein 5 of hind wing from near lower angle of cell, and H compactilis has a tuft on inner side of 3rd joint of palpus.

2761. Omit Sanys flexus, Moore, from synonymy. See 2720, p. 536

2763 a. Capnodes caustiplaga, n sp

Q. Grey-brown suffused with pink Fore wing with minute dark specks in cell and on discocellulars; traces of a sinuous brown postmedial line, a submarginal line highly angled below costs, then double and ending at outer angle, the area beyond it fiery red with two dentate yellow marks near outer angle, some dark specks just inside margin. Hind wing similar, but the red patch small

Hab. Bhután (Dudgeon). Exp 32 millim. Type in B. M.

2782 a. Raparna uncifera, n sp

d. Head and collar fuscous brown, thorax purplish grey, abdomen pale brown. Fore wing dull purple, an oblique black subbasal band from subcostals to inner margin, with a hook on outer side, an indistinct discocellular band, traces of a sinuous

postmedial line represented by ochreous scales Hind wing fuscous brown.

Hab. Hambantota, Ceylon (Pole). Exp. 24 millim. Type in B. M.

2782 b. Raparna crenulata, n. sp

Both wings with the outer margin crenulate and produced to a

point at vein 4.

Q. Grey-brown, head and collar chestnut. Fore wing with some dark specks on basal area; an ill-defined double medial line angled below costa; a waved postmedial line with series of dark specks beyond it. Hind wing with dark discocellular speck; double sinuous ferruginous medial line; a waved postmedial line with series of dark specks beyond it, a prominent black patch at anal angle.

Hab. Bhután (Dudgeon), Borneo (Wallace) Exp 26 milim.

Type in B. M.

Genus PROGONIA, nov

Type, P. remferalis, Hmpsn.

Range. Oeylon.

Palpi upturned, the 2nd joint reaching above vertex of head, the 3rd long with a tuft on inner side, in male sharply bent over the head, antennæ with long bristles and cilia, fore tibia covered by a sheath containing masses of ficculent scales. Fore wing with veins 3, 4, 5 from close to angle of cell, 6 from below upper angle; 7, 8, 9, 10 stalked Hind wing with veins 3, 4 stalked; 5 from angle of cell, 6, 7 stalked.

2793 a Progonia remiferalis, n sp.

of. Grey mottled with brown. Fore wing with subbasal black costal striga; a highly crenulate antemedial line arising from



Fig 278 Progonia reinferalis, d }

an oblique costal striga, an oblique dark chocolate reniform spot with ochreous centre and traces of fuscous line from it to inner margin; a dentate postmedial line, very oblique and straight from costa to vein 6; an irregularly dentate pale submarginal line, a mar-

ginal series of dark specks Hind wing paler, with indistinct postmedial line angled at vein 2; traces of a pale waved submarginal line, a marginal dark line, and ochreous line at base of cilia

Q with the reniform mark obsolescent. Hab Ceylon (Pole). Exp. 22 millim. Type in B. M.

2800. Omit Egnasia nubifascia and Ceylon and insert under 2804, Adrapsa scopigera.

2834 a. Mastigophorus prunalis, n sp

J. Reddish brown slightly suffused with purple; palpi fuscous slightly mottled with grey. Fore wing with indistinct waved antemedial and medial lines; a white speck in cell and large fuscous speckled ochreous discocellular patch, a double postmedial sinuous line angled below costa and excurved round lower angle of cell. Hind wing fuscous brown; both wings with sinuous submarginal series of white specks. Underside fuscous, with submarginal series of pale specks.

2. Fore wing with two discocellular black specks replacing the

ochreous patch

Hab. Puttalam, Ceylon (Pole). Exp. 36 millim. Type in B. M.

- 2840 a Falcimala lativitta, Moore, P Z S. 1883, p 29, C & S no 4297.
- Q. Palpi with the 2nd joint much more thickly clothed on both sides with long hair. Pale yellowish brown, palpi red-brown at base; abdomen with the dorsal tuft dark. Fore wing irrorated with red-brown, two brown subbasal spots, a curved rufous antemedial line bent outwards below costa; the medial area brown, bounded by a pale discocellular lunule with two black specks on its outer edge and a curved rufous line from it to inner margin, a diffused rufous sinuous submarginal line arising from a brown patch on costa, a marginal series of dark specks, the cilia rufous. Hind wing whitish, underside with discocellular spot.

Hab. Sikhim. Exp 24 millim.

2840 6 Falcimala ochrealis, n sp

d. Head, thorax, and abdomen bright ochreous and black. Fore wing bright ochreous irrorated with black, a black patch at base of costa followed by a black streak, an oblique black wedge-shaped mark from middle of costa to beyond lower angle of cell, and embracing a discocellular black mark; some black specks on costa towards apex; the marginal area black, narrowing to apex and below middle, a marginal series of ochreous specks. Hind wing fuscous black.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 16 millim. Type

mB.M.

2843 a. Nagadeba pictalis, n sp

Q. Chestnut-brown; head, thorax, and abdomen variegated with white. Fore wing with the basal area variegated with white; traces of a waved antemedial line and of a medial line angled on median nervure; two dark discocellular specks, some white specks on costa towards apex; some white suffusion and three black specks below apex; a crenulate white marginal line. Hind wing with the basal area suffused with fuscous; traces of a waved white medial line; a dentate grey postmedial line on a deep black irregular band; a crenulate white marginal line. Hab. Bhután (Dudgeon) Exp. 22 millim. Type in B M.

Genus NICEVILLEA

Nicevillea, Hmpsn. Trans Ent Soc. 1895, p. 307.

Type, N epiplemoides, Hmpsn.

Range Burma.

- Q. Palpi upturned and smoothly scaled, the 2nd joint nearly straight except at base and reaching above vertex of head, the 3rd long, antennæ with cilia and fine bristles, tabæ with medial and distal tufts of long scales and a similar tuft at end of 1st tarsal joint. Fore wing with the costa nearly straight, the apex produced and acute, the outer margin minutely crenulate and highly angled at vein 4. Hind wing with the outer margin nearly straight and minutely crenulate from the apex to vein 3, and from thence to anal angle extremely truncate and with two excisions, veins 3, 4, 5 from close to lower angle of cell, 6, 7 from upper angle.
- 2845 a. Nicevillea epiplemoides, Hmpsn. Trans. Ent. Soc. 1895, p 307
- Q Brownish grey, irrorated with brown scales, the tufts on legs grey and brown. Fore wing with some black specks on costa and another in cell, a fine brown line from origin of vein 2 to inner margin near base; a postmedial oblique fine brown line; a subapical black spot and another on inner margin near outer

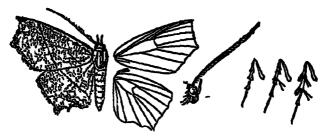


Fig 279 — Nicevillea epiplemoides, 2

angle. Hind wing with speck in cell; a fine oblique medial brown line, two obscure yellowish lumilate spots with fuscous inner edge between veins 2 and 4 above a waved fuscous line from anal angle to vein 5; both wings with traces of brown marginal line. Underside with traces of curved dark medial line and submarginal specks to fore wing; hind wing with a dark spot on costa towards apex.

Hab. Dawnat Range, Tenasserim. Exp. 44 millim.

2848. Hydrillodes transversalis=2879 Catada vagalis.

Vol. III, p. 56. Under Nodaria insert Lysimelia, Wlk. Cat. xvi, p. 201 (1858); and Antita, Wlk. Cat. xxxiv, p. 1206 (1865).

2855 a. Nodaria mundiferalis, Wlk. Cat. xxxiv, p. 1206

Yellow; head and thorax tinged with fulvous. Fore wing with some dark rufous at base of costa, two black specks at the angles of cell, traces of a postmedial series of dark specks on the veins, a submarginal series of small white lunulate spots; the marginal area suffused with dark rufous; the cilia fuscous Hind wing whitish in male, fuscous in female; traces of a discocellular lunule and postmedial line angled at vein 2, the marginal area suffused with brown Underside suffused and irrorated with brown, hind wing with discocellular lunule, crenulate postmedial line, and submarginal series of white specks

Hab Bhután; Borneo Exp 22 millim

2856 Insert (syn) Herminia dolosa, Butl. A. M N. H. (5) iv, p. 446.

2857 a Nodaria grisealis, Schiff. Wien Verz p 120

Differs from erecta in the submarginal line of fore wing being bent outwards to the apex

Hab. Europe, Japan; Sikhim. Exp. 24-26 millim

2858 a. Nodaria erythropoda, n sp.

d. Differs from erecta in being otherous, the tufts on fore tibia orange-red. Fore wing with the antenedial line extremely oblique, the postmedial line more oblique and angled beyond the cell. Hab. Bhután (Dudgeon) Exp. 36 millim. Type in B. M.

2870 Nodaria lysimeloides = N. neleusalis, Wlk Cat. xvi, p. 201.
Borneo

Genus STHENISTIS, nov.

Type, S. gyrtoniformis, Hmpsn.

Range Cevlon

Palpi upturned, the 2nd joint thick, the 2nd and 3rd curved over vertex of head, antennæ of male ciliated, abdomen long. Fore wing narrow in male, vein 6 from below angle of cell, 7 & 8 stalked, 9, 10, 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 from middle of discocellulars; 6, 7 stalked.

2874 a. Sthenistis gyrtoniformis, n sp.

d. Head and thorax pale and dark brown, abdomen paler.



Fig 280 Sthenistis gyrtoniformis, of

Fore wing pale brown, thickly marked with short dark brown streaks in the interspaces, the inner margin paler, also the outer area except towards costa, traces of an antemedial line appearing as a wedge-shaped mark on inner margin, a dark speck at lower angle of cell, with an obscure oblique line from

it to inner margin Hind wing fuscous brown

2. Fore wing broader, with the inner and outer areas prominently paler

Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

Vol. III, p. 61 Under Catada insert Micreremites, Warr A. M. N. H. (6) viii, p. 66.

2875 a Catada fatua, War A M N H (6) viii, p. 65

Pale greyish suffused with fuscous, palpi black at base. Fore wing with the outer margin excised below apex: traces of a subbasal line; the medial area black, bounded by sinuous ante- and postmedial lines, the latter excurved and enclosing a black spot beyond cell, then incurved; pale submarginal specks on costa and above middle Hind wing with the outer margin excised below apex, a sinuous dark medial line and pale sinuous submarginal line, becoming obsolescent on the pale costal area. Underside with the basal half of wings suffused with black

Hab Khásis. Ewp 18 millim.

2879 Insert (syn) Hydrillodes transversalis, Moore, P. Z. S. 1877, p 613, C. & S no 2974.

Genus HÆMATOSTICTA, nov.

Type, H sanguigutiata, Hmpsn.

Range. Ceylon.

Palpi upturned and reaching vertex of head, the 2nd joint fringed with long scales in front, the 3rd naked and acute, antennæ of male minutely ciliated; tibiæ with the spurs long Fore wing with the apex rounded, vein 3 from before angle of cell, 4, 5 from angle, 6, 7 from upper angle, 8, 9, 10 stalked from before end of cell, with a minute arcole at their base, 11 absent Hind wing with veins 3, 4 stalked, 5 from near middle of discocellulars, 6, 7 stalked.

2886 a. Hæmatosticta sanguiguttata, n sp.

Pale olive-brown; head grey irrorated with black, thorax and abdomen with paired blood-red



Hamatostrcia sangurguttata, d

abdomen with paired blood-red spots. Fore wing with the costa grey, irrorated and spotted with black, both wings with subbasal, antemedial, medial, postmedial, and submarginal series of blood-red spots, the postmedial excurved beyond cell of fore wing; each wing with a discocellular red and

black spot, most prominent on hind wing, fore wing with fuscous and grey marginal patches at and below apex and above outer angle, both wings with marginal series of black striss.

Hab. Ceylon (Green). Exp. 12 millim. Type in B. M.

2887 a. Aræopterum fasciale,

J. Head and collar white; palpi black, thorax and abdomen fuscous. Fore wing pale fuscous, the costal area suffused with white; a dark mark with two white specks on it on costa before apex, an oblique white postmedial line and indistinct waved submarginal line. Hind wing pale fuscous, with black-edged medial band with whitish suffusion beyond it, an indistinct submarginal white line.

Hab Ceylon (Green) Exp 12 millim. Type in B. M

Genus PTYORHYNCHA

Ptyorhyncha, Hmpsn Trans Ent Soc 1895, p 308

Type, Pargyresthis, Hmpsn

Range Bhután

Q. Palpi with the 2nd joint straight, oblique and fringed with hair above, the 3rd upturned, with a very large tuft on inner side, a slight frontal tuft, antennæ of female nearly simple, tibiæ hairy. Fore wing with the costa much arched, the outer margin excised below apex, produced to a hook at vein 4, then excised to outer angle, vein 8 given off from 7 and anastomosing with 9, which is given off from 10 to form the arcole Hind wing with the anal angle truncate, vein 5 from lower angle of cell

2895 a Ptyorhyncha argyresthis, Hmpsn Trans Ent Soc 1895, p 308

Q Deep chestnut. Fore wing thickly covered with fine strie, the basal two-thirds with a silvery sheen except the costal area and a sinuous medial band, the outer edge of this area sinuous, a patch of bright silvery suffusion on outer area above middle connected

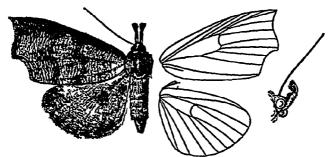


Fig 282—Ptyorhyncha argyresthis, Q 3

with the outer angle by a sinuous band, a marginal series of silvery strime. Hind wing reddish brown suffused with fuscous, and with numerous fine dark strime on outer area; a marginal series of silver specks, cilia of both wings red at tips.

Hab. Bhután Exp 66 millim.

Vol. III, p. 68 Read Ectogonia for Camptochilus (præocc.).

2904 a. Marapana rectilineata, n'sp

Q. Palpi oblique, the 3rd joint naked. Pale ochreous suffused with brown and irrorated with fuscous and pink, wings slightly tinged with pink. Fore wing with indistinct straight brown antemedial line, a black speck in cell, a waved medial line excurved at middle; an oblique striga at upper angle of cell, both wings with a double straight postmedial line highly angled below costs of fore wing; an indistinct irregularly waved submarginal line; a marginal series of black specks. Hind wing with indistinct waved antemedial line and black speck at lower angle of cell

Hab. Puttalam, Ceylon (Pole). Exp. 24 millim. Type in B M

2928 a. Hypena subvittalis, Wil. Cat. xxxiv, p. 1148

Dark red-brown Fore wing irrorated with grey, traces of a ferriginous antemedial line outwardly oblique from costs to above vein 1, where it is angled; an indistinct medial ferriginous line running out to a sharp angle at lower end of cell; the tufts of raised scales at middle and end of cell usually with some black scales round them, and often with a black fascial between them and beyond them curved up to apex. Abdomen and hind wing fuscous

Hab Ceylon; Java, Australia. Exp. 22 millim.

2936 a. Hypena acypera, n sp

Palpi with the 2nd joint long, the 3rd upturned, long, naked

except for a triangular tuft of scales at middle.

3. Pale ochreous brown irrorated with fuscous; palpi blackish at sides and with the tuft on 3rd joint black. Fore wing with small tufts of black and white scales at middle and end of cell, an oblique hine from median nervure to inner margin near base; an oblique postmedial whitish line with dark inner edge, a sinuous submarginal line joined by an oblique streak from apex, and with a white spot and dark patch above middle.

♀ with harely a trace of the submarginal markings.

Hab. Bhután (Dudgeon). Exp. 24 millim. Type in B M.

2938. Hypena divaricata = 2927. H. lignealis.

2941 a. Hypena nocturnalis, Swinh A. M. N. H (6) xvu, p 363.

d. Differs from tenebrals in being fuscous irrorated with grey and without the rufous tinge. Fore wing with the obliquely sinuous antemedial line more distinct, the postmedial line with pale outer edge and straight except for a slight bend inwards at lower angle of cell; a sinuous submarginal line in continuation of the black specks below costs. Underside of fore wing with two subspical black and white specks.

Hab. Khásis. Exp. 36 millim.

545

2942. For Hypena dentilmeata read H. denticulata.

2953 Hypena castanealis is a variety of 2952 H. divisalis

2961 Hypena modesta=2976 H thermesialis.

2979. Hypena triangularis is a variety of 2977, H. occata, which is the common and widespread form, whilst absimilis and triangularis are varieties found on the Khásis, the last name has precedence for the species

Genus HARITALOPHA.

Haritalopha, Hmpsn Trans Ent Soc 1895, p. 309

Type, H biparticolor, Hmpsn

Range Bhután

Palpi oblique and clothed with hair, the 2nd joint reaching the apex of the sharp frontal tuft, the 3rd long; antennæ ciliated, thorax with a sharp triangular tuft above, abdomen with large conical tuft on 2nd segment followed by smaller tufts. Fore wing with the apex acute and produced, the outer margin excised from apex to vein 4 Hind wing with vein 5 from middle of discocellulars, 3, 4 and 6, 7 from angles of cell

2988 a Haritalopha biparticolor, Hmpsn Trans Ent Soc 1895, p 309

d Head and thorax red-brown with a purplish tinge, abdomen fuscous Fore wing purplish red-brown, traces of a curved antemedial line, a dark line on discocellulars, a rufous postmedial line angled at vein 5, then sharply recurved, the area beyond it greyish



Fig 283 — Haritalopha biparticolor, of 1

fuscous with a brown mark at middle of outer margin, cilia brown Hind wing fuscous, with a pale streak with dark mark above it above anal angle Underside grey, an indistinct postmedial line recurved below vein 5 on fore wing, evenly curved on hind wing.

Hab Bhután Exp 46 millim

Vol III, p. 95 Under Chusaris insert Tipasa, Wlk. Cat. xxvii, p. 129 (1863).
Vol. IV. 2 N

2996 a. Chusaris nebulosella, Wik Cat xxvii, p 129.

d. Head, thorax, abdomen, and fore wing pale ochreous irrorated with olive-brown and fuscous. Fore wing with traces of antemedial line; a white spot at lower angle of cell, a double curved postmedial line, the outer area slightly suffused with pink, an indistruct pale submarginal line with some black marks on it at middle and near outer angle; a marginal series of black specks Hind wing bright pink. Underside of fore wing suffused with pink, hind wing ochreous, with pink discocciliular spot and irroration.

Hab. Ceylon; Borneo Exp. 18 millim.

3002 a Chusaris aurantilmeata, n sp.

Q Black. Fore wing with orange and black subbasal speck below costa, some orange specks on costa, a minutely waved antemedial orange line with black spot on it below cell, a black discocellular spot; a postmedial orange line slightly angled at lower end of cell, an indistinct sinuous orange submarginal line angled outwards at middle, a marginal series of black and orange specks, abdomen and hind wing fuscous.

Hab Ceylon (Pole). Exp. 21 millim. Type in B. M

3006 a Arrade vitellialis, Wlk Cat xvn, p 386, C & S no 4295

J. Fuscous Fore wing with the basal half brown, bounded by an inwardly oblique pale line with the area beyond it fuscous black, becoming brown again towards the blackish marginal band, which has a pale waved line on its inner edge

Hab Moulmein. Eap 24 millim.

3008 a Hypenagoma leucosticta, Hmpsn. Trans Ent Soc. 1895, p 309

3. Differs from vexataria in the palpi being longer, the 2nd joint more thickly fringed with long hair, the 3rd long, slender and upturned, abdomen banded with fuscous and white. Fore wing with more prominent lines and diffused bands; two white-edged black specks on discocellulars, a prominent short white subapical streak. Hind wing with much more prominent black lines and diffused fuscous bands which have no rufous tinge, a submarginal black and white line to both wings

Hab. Bhután. Exp. 16 millim

Genus PROLOPHOTA, nov.

Type, P. trigonifera, Hmpsn.

Range. Ceylon

Palpi porrect, extending about twice the length of head, the 2nd joint fringed with long hair above, the 3rd upturned and triangularly scaled, from with a tuft of hair, antennæ of male cliated, mid tibiæ slightly fringed with hair; hind tibiæ with a slight tuft at extremity and slight tufts at lower ends of the tarsal joints. Fore wing with the apex acute; the outer margin excised to vein 4,

where it is angled, veins 8, 9, 10 stalked Hind wing with the outer margin angled at vein 4, veins 3, 4 from angle of cell; 5 from just above angle, 6, 7 from upper angle.

3008 b. Prolophota trigonifera, n sp

J. Pale ochreous slightly irrorated with fuscous, palpi fulvous, wings with a few black specks. Fore wing with indistinct waved antemedial and medial lines, the former arising from a black speck on costa, the latter from a small triangular spot, an

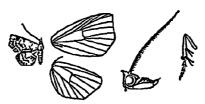


Fig 284.—Prolophota trigonifera, & 1.

indistinct annulus in cell, a dentate postmedial line excurved beyond cell, a large dark fulvous triangular patch on costa beyond middle, with three white specks on it, traces of a dentate submarginal line with slight fuscous suffusion beyond it, a marginal series of black specks. Hind wing with nearly straight antemedial line, two indistinct waved postmedial lines, the margin suffused with fuscous, a marginal series of black specks.

Hab Hambantota, Ceylon (Pole) Exp 16 millim Type in B M.

URANIIDÆ.

3025. Pseudomicronia cælatu=Micronia oppositata, Snell Tijds v Ent xxiv, p 84, pl 9, fig. 6

EPIPLEMIDÆ.

3041 a Epiplema inhians, Wari A M N H (6) xvii, p 214.

Differs from *irrorata* in the general colour being dark brown Fore wing with the apical area rufous, the postmedial line very acutely angled on vein 4 of both wings, defined by black on inner side on fore wing and on outer side of hind wing, hind wing with an elongate white mark in cell

Hab Sikhim, Khásis. Eap 18 millim.

3042 a. Epiplema albipunctata, Wari A MN H (6) xvii, p 212.

Q. Dark brown with a leaden tinge Fore wing with anteand postmedial lines highly excurved and defined on inner side by black below costs, the latter with two pale specks above inner margin; a dark subapical speck and incomplete lunule at the excision. Hind wing with incomplete dark antemedial line, a pale postmedial line defined by brown, produced to an acute angle on vein 4 and with dark marks on its inner side below the angle; three white subapical specks and two minute streaks with dark spots below them at the lower tail

Hab Khásis Evp 26 millim

3051 a. Epiplema ochreofumosa, Warr A M N. H (6) xvii, p 215.

d Head and thorax fuscous brown, the vertex of head white, abdomen yellowish white, the base dark. Fore wing pale, suffused and irrorated with purplish fuscous, the area near postmedial line and the outer area except at apex least suffused, a ferruginous discocellular spot, a dark postmedial line with ferruginous on its inner edge, oblique from costa to vein 4 where it is angled, a submarginal series of brown stries. Hind wing yellowish white, slightly irrorated and striated with brown, the base brown, a postmedial rufous line running out to a rounded projection near margin on vein 4, with ferruginous suffusion beyond the excurved part and on tail, which has a minute white streak and black speck, a dark marginal line between the tails.

Hab. Khásis Exp 28 millim.

3053 a. Epiplema sponsa, Swink. A. M. N H. (6) XVI, p. 293.

Q. Head, thorax, and basal segments of abdomen grey and fuscous, the last with the terminal segments darker, wings grey, striated with fuscous, the basal half of fore wing and whole of hind wing suffused with pale yellow-brown. Fore wing with waved ante- and postmedial lines approaching each other at middle and filled-in with dark grey except at middle; a black discocellular spot; some grey suffusion beyond the medial band and three obliquely placed submarginal medial spots on a grey patch. Hind wing with grey suffusion from base below cell to outer margin; an indistinct antemedial line angled outwards below the prominent black discocellular spot, four lumiles on medial part of outer margin, the two upper black filled-in with rufous.

Hab. Khásis. Exp. 24 millim.

3054 Omit from synonymy Erosia lanigera, Hmpsn., which is the female of 3064, Dirades unicauda, Hmpsn., p. 132

3061 a. Epiplema argentisparsa, n sp.

Fore wing with the outer margin crenulate. Hind wing with the costa excised and with tufts before and beyond the excision, the outer margin with a tail at vein 4 and points at veins 2 and 7.

Q. Very dark leaden grey prorated with silvery blue; abdomen with some rufous on dorsum, wings with the lines rufous and black. Fore wing with curved antemedial and waved postmedial lines; a sinuous submarginal line from costa to vein 2. Hind wing with antemedial maculate line, a postmedial line angled at vein 4 and with black and rufous marks on its inner edge, a rufous and black lunulate marginal band

Hab. Bhutan (Dudgeon). Exp. 28 millim. Type in B M.

SECT III. Antennæ of male serrate and fasciculate, fore wing with the outer margin evenly rounded, hind wing with a fold on inner area containing a tuft of hair.

3063 a. Epiplema scopocera, n sp.

Differs from tenebrosa in the submarginal line of fore wing being much more irregular and bent inwards between veins 5 and 6; hind wing with the postmedial line straight and oblique from costa to vein 4 where it is sharply angled; the lumilate marginal marks more prominent and marked with chestnut between the tails. Underside of hind wing white in male.

Hab. Coylon (Green) Exp. 18-22 millim. Type in B. M.

SECT IV. Antennæ of male bipectinated; outer margin of fore wing evenly curved, of hind wing produced to points at veins 7 and 4.

A. Fore wing with no fovea; hind wing with no lobe at base of costa.

3063 b. Epiplema nigrifrons, n sp

d. Whitish irrorated with fuscous brown; from black; antenne with the branches blackish; wings slightly striated with brown. Fore wing with prominent dark strice on outer half of costa, an obsolescent postmedial ferruginous line highly excurved below costa, the area beyond it more striated and suffused with brown, a dark band just inside the margin from below apex to vein 4. Hind wing more uniformly irrorated and striated; an indistinct subbasal line; a discocellular line and black speck at lower angle of cell, a postmedial line double from costs to vein 4 where it is strongly angled, then recurved and with a rufous band on its inner edge; a brown and black marginal band between the points and a spot at vein 4: underside white.

Hab. Toungoo, Burma (De Nicéville). Exp. 30 milim. Type

in B.M.

B. Fore wing of male with a fovea below base of cell; hind wing with a love at base of costa articulating with the retinaculum as well as the frenulum.

3063 c Epiplema pectinicornis, Dudgeon, MS

Grey-brown; vertex of head white; wings with numerous dark strie. Fore wing with postmedial rufous line angled beyond lower angle of cell; a submarginal lumulate dark mark below apex. Hind wing with ill-defined antemedial line; a postmedial rufous line defined by fuscous on inner side and acutely angled at vein 4; a pale marginal line with rufous inside it and three black spots between veins 5 and 2.

Hab Sikhim, Bhután (Dudyeon) Exp. 26 millim. Type in B M

- 3064 a. Dirades lituralis, Warr. A. M. N. H. (6) xvii, p. 214.
- Q. White, slightly irrorated and striated with brown and black. Fore wing with broad blackish medial band, its inner edge indented by an angle at middle, its outer defined by a slightly sinuous rufous line, the apex brown, with a series of four submarginal black specks below it. Hind wing with traces of dark antemedial line, acutely angled at middle, and of a sinuous rufous postmedial line, a brown lumile defined by black below upper tail and brown and black speck below lower.

Hab. Khásis. Exp. 18 millim.

- 3066. Dirades conifera, 3067. D. leucocera. The males have the venation of hind wing as in Sect. I A.
- 3070 a. Gathynia fumicosta, Warr A. M N. H (6) xvii, p. 215.
- d. Head, thorax, and abdomen fuscous. Fore wing with the costal area fuscous, the apex ferruginous; a ferringinous fascia below costa; the inner two-thirds of wing greyish, with obscure medial and submarginal curved lines. Hind wing with the costal half whitish tinged with ferruginous, and crossed by oblique medial and postinedial ferruginous lines; the inner half rufous, with the fold pale.

Hab. Khásis; Nágas. Exp. 22 millim.

Vol. III, p. 136. Atossa being preoccupied, read Nossa, Kirby, Oat. Lep. Het. p. 56 (1892).

GEOMETRIDÆ.

- Vol. III, p. 164. Under Stegania insert Orthobrachia, Warr. Nov. Zool. 1895, p. 121, for Sect. II.; and Hydatocapnia, Warr. Nov. Zool. 1895, p. 143, for Sect. I. A.
- 3141 a. Stegania micans, n. sp.
- branches of antennæ and a band between their bases ferruginous; anal tufts grey. Fore wing with a patch beyond cell and the costal area ferruginous, with grey stræ towards apex, a dark discocellular striga; indistinct waved ferruginous antemedial and postmedial lines, the latter excurved beyond cell. Hind wing with indistinct waved ferruginous postmedial line. Underside with the basal two-thirds ochreous; fore wing with the apex rufous with dark striæ, the outer margin angled at middle.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 32 millim. Type

in B. M.

Genus LITHINA.

Lithina, Hubn Verz p 338 (1818?)

Type, L petraria, Hubn, from Europe.

Range. Europe, Kashmir.

Palpi porrect, thickly fringed with hair and reaching just beyond the frons, which is smooth and rounded; antennæ of male thickened and flattened, hind tibiæ dilated, with a fold containing a tuft of long hair, scaling smooth. Fore wing with the apex somewhat produced, vein 3 from near angle of cell; 7, 8, 9, stalked, 10 anastomosing with 11 and then with 8, 9 to form a double areole Hind wing with vein 3 from near angle of cell, 6, 7 from upper angle

3184 a. Lithina triumbrata, Warr. Nov. Zool. 1895, p. 131.

3 Pale ochreous brown Fore wing irrorated with fuscous; an indistinct somewhat oblique antemedial line with dark spots on median nervure and vein 1, an indistinct postmedial dark line



Fig 285 - Lathina triumbrata, &. 1.

with short dark streaks on the veins, excurved below costs, incurved from vein 5 to inner margin. Hind wing paler, with traces of medial line, underside with postmedial line, with short dark streaks on the veins

Hab Gurais Valley, Kashmir. Exp 42 millim.

Vol. III, p 187 Under Eurytaphria insert *Psilotaphria*, Warr Nov Zool 1895, p 154, for Sect II

3199 a Eurytaphria xanthoperata, n sp

Head yellow, thorax, abdomen, and wings brown irrorated with glittering scales, and with a few dark strice. Fore wing with an indistinct highly curved antemedial dark line, a discocellular speck, a postmedial line excurved from costa to vein 2, then recurved, the costa, margin, and cilia yellow. Hind wing with discocellular speck and indistinct curved postmedial line; the margin and cilia yellow.

Q with the cilia of both wings, not the margin, yellow. Hab Ceylon (Green) Exp 20 millim Type in B. M.

3199 b. Eurytaphria pachyceras, n sp

3. Antennæ thickened and flattened, in female simple.

Head reddish brown, thorax and abdomen dark brown. Fore wing pale brown striated with dark brown, the basal area, the inner side of the postmedial line, and the area near outer angle suffused with fuscous; a dark discocellular speck; an indistinct minutely waved pale postmedial line. Hind wing wholly suffused with fuscous; a dark discocellular speck and minutely waved dark postmedial line, the cilia brown. Underside pale brown, with dark discocellular speck and minutely waved postmedial line to each wing.

Q without the fuscous suffusion, so that the striation and postmedial lines are more distinct; fore wing with some rufous suffusion on inner side of the postmedial line and a dark spot

beyond it below middle

Hab. Sikhim; Bhután. 2500 feet (Dudgeon). Exp., & 22, 9 24 millim. Type in B. M.

- 3211. Spilopera divaricata. Antennæ of male bipectinate, with short branches; hind tibiæ not dilated China
- 3211 a. Spilopera ochreifusca, Hmpen Trans Ent Soc 1895, p 810.

Fore wing with the outer margin dentate below spex as well as angled at vein 4

3. Brownish ochreous irrorated with fuscous. Fore wing with the basal half purplish fuscous, emitting an irregular broad fascia from lower angle of cell to the fuscous marginal area which extends from vein 5 to inner margin, leaving the apex ochreous; an antemedial curved series of dark specks, an oblique diffused waved postmedial band not reaching the costa, a sinuous submarginal series of dark specks. Hind wing with black cell-spot; a diffused fuscous medial band; the marginal area fuscous Underside with a reddish tinge; a diffused dark postmedial line; a submarginal series of dark specks, with the area beyond them greyish.

Hab. Bhután. Exp. 34 millim

- 3225 = Zamarada scriptifasciata, Wlk. Oat xxvi, p 1566, and omit translucida. Moore.
- 3226. Z. cosmucria = Zamarada translucida, Moore, Lep Ceyl. iii, p. 432, pl. 197, fig 2; C. & S no. 3515 Borneo, Java. Moore's type 1s from Java; Walker's translucida MS = scriptifasciata from Borneo.
- 3226 a. Zamarada minimaria, Swah A. M N H. (6) xv1, p 293.
- Q. Head, thorax, and abdomen grey and brown, the anal tuft pink, wings yellowish hyaline, with a broad marginal leaden-grey band irrorated with silver, inwardly edged by a sinuous rufous line slightly excurved at middle on each wing, and with traces of a rufous submarginal line. Fore wing with some ochreous and

brown on the costa, an annulus at end of cell and two ochreous and rufous lines from cell to inner margin before the middle. Hind wing with an antemedial ochreous and rufous band from cell to inner margin.

Hab. Karáchi Evp 18 millim

3226 b. Zamarada xanthyala, n sp

d Head ferruginous, collar pale yellow, thorax and first segments of abdomen ferruginous and pale vinous, distal part of abdomen ochreous. Fore wing brassy hyaline yellow, costa slightly tinged with terruginous, a dark discocellular speck, the inner and outer areas broadly vinous, crossed by obscure ferruginous bands, the inner edge of outer area sinuous. Hind wing similar, the inner edge of the outer area more highly sinuous, the hyaline area running out beyond lower angle of cell

2 with the inner and outer areas of wings more orange in

tone.

Hab Sikhim (Pilcher), Sandakan, Borneo (Pryer) Exp. 30 millim. Type in B. M

3236 a Macaria fumipennis, Hmpsn Trans Ent Soc 1895, p 310.

d Differs from fasciata in being much darker, head and antennæ with hardly a trace of fulvous, abdomen slightly tinged with fulvous towards extremity, wings much suffused with fuscous. Fore wing with some fulvous suffusion on costa, expanding into a patch beyond the angle of the postmedial line, with a black patch on it, the medial band of both wings leaden grey instead of white. Hind wing with the black patches beyond the postmedial line large and on olive-brown suffusion. Underside with large patches of fulvous suffusion at base of each wing, extending along costa of fore wing to apex and expanding into a large postmedial patch.

Hab Bhután. Exp. 44 millim.

3267 a. Hyposidra polia, Hmpsn Trans Ent Soc 1895, p 310

Grey with a brown tinge, and sparsely irrorated with black scales. Fore wing with an indistinct medial brown band, more prominent in the male than the female and defined outwardly by a sinuous white line angled at vein 4, a pale waved submarginal line with some brown on its inner edge, almost obsolete in female. Underside with indistinct curved postmedial line to each wing.

Hab Ceylon Exp, o 30, 2 40 millim

Genus ORPHNE

Orphne, Hubn. Verz. p 314 (1818?)

Type, O_tenebraria, Esp

Range Europe; N.W. Himalayas

Palpi porrect, projecting beyond the frons and clothed with long

hair, from with a rounded prominence, antennæ of male bipectinate, scaling smooth. Fore wing with the costa arched at base and towards apex, which is rounded; vein 3 from well before angle of cell, 9 given off from 10 and anastomosing with 8, which arises from 7 to form the arcole. Hind wing with vein 3 from well before angle of cell; 6, 7 from upper angle; 8 connected with 7 by an oblique bar.

3284 a. Orphne tenebraria, Esp Schmett Eur. 51, 6 Geometra torvaria, Hubn. Samml eur Schmett figs 366-9 Parascotia olivacea, Wair Nov Zool 1895, p 129.

Dark brown. Fore wing with traces of pale antemedial band, both wings with indistinct dark discocellular spot, an indistinct



Fig 286 - Orphne tenebraria, & }

pale waved submarginal band. Underside with curved white postmedial band to each wing, broadest towards costs of fore wing; the apex of fore wing with some white marks. Abdomen white below.

Hab. Europe; Spits. Exp. 38 millim.

Vol. III, p. 228. Under Leptomiza insert Occlophora, Warr. Nov. Zool. 1895, p. 150.

3332 a. Heteromiza leucogonia, Hmpsn. Trans. Ent. Soc 1895, p 811.

of. Antennæ with very short branches Differs from cruentaria in the abdomen having rufous dorsal marks. Fore wing with the basal and inner areas thickly spotted with rufous, a large oblique spot from costa to lower angle of cell and smaller spots below and beyond end of cell, no oblique postmedial line, but the outer area very broadly rufous with irregular inner edge, a large greyish patch on costa before apex, with a black-edged silvery-white davitorm mark on its lower edge and two similar specks on outer edge. Hind wing spotted with rufous; large spots in and below end of cell; a large patch at apex conjoined to an irregular patch at anal angle.

Hab. Khásis. Exp. 48 millim.

3360. Insert (syn.) Boarma diffuaria, Wlk. Cat. xx1, p. 490; C. & S. no. 3319.

Vol. III, p 257. Under Boarmia insert Blepharoctenucha, Warr. Nov Zool. 1895, p 126, for Group II. Sect. I D.

3394 a. Boarmia coremiaria, n sp

of. Antennæ with very long fascicles of cilia Red-brown irrorated with grey and fuscous Fore wing with black striæ on costa, obliquely curved ante- and postmedial series of black specks, a black discocellular speck and speck on costa above it, a white speck below vein 5 beyond the postmedial series, traces of a submarginal waved line arising from a black spot below costa; a marginal series of specks. Hind wing with two medial series of specks; traces of a submarginal waved line; a marginal series of specks. Underside with basal half whitish, crossed by antemedial and medial dark lines, dilated on fore wing; the outer area fuscous, with a whitish spot at apex.

Hab Ceylon (Green) Exp 30 millim. Type in B. M.

3397 a Boarmia thricophora, Hmpsn. Trans Ent Soc 1895, p 311

A Hind wing with a thick fringe of long hair on inner margin. Pale rufous and grey, slightly irrorated with fuscous. Fore wing with blackish antemedial, medial, and postmedial spots on the costa, from the last of which a curved series of specks arises, an indistinct dentate submarginal line, with blackish patches inside it just above middle and towards inner margin. Hind wing with sinuous medial line, a whitish dentate submarginal line, with blackish patches inside it above middle and towards inner margin; both wings with marginal series of black specks. Underside ochreous, with diffused fuscous on outer area of fore wing except at apex and outer angle, hind wing with a fuscous patch at apex.

Hat Sikhim. Exp 28 millim

3401. B comparatana = Boarmia exclusaria, Wlk Cat xxi, p 490, C & S no 3321, which has precedence Ceylon

3454 a Boarmia leucodontata, n. sp

of Ohve-brown irrorated with fuscous and grey. Fore wing with antemedial black line angled below costa and with a rufous band inside it, a discocellular black spot with traces of a line excurved round it, then oblique, an obliquely curved postmedial line with rufous band beyond it, a dentate white submarginal line, with blackish streaks from it to outer margin, a marginal series of black specks. Hind wing with subbasal black line, a discocellular spot; medial line with rufous band beyond it, the outer area more irrorated with fuscous, with dentate submarginal white line, a crenulate marginal black line. Underside paler olive, striated with black, fore wing with black spot in cell, both wings with large discocellular spot and diffused fuscous submarginal band, the apex of fore wing whitish

Hab. Ceylon (Green) Exp 32 millim. Type in B M.

- 3487 a. Medasina reticulata, Hmpsn Trans Ent Soc 1895, p 311
- White irrorated with brown, abdomen with brown bands, anal tuft ochreous, wings structed with brown. Fore wing with a brown patch at base of costa, two curved antemedial lines, a fascus along median nervure, a medial line conjoined to a discocellular lunule and at inner margin to a postmedial brown band, with a dentate white line on it which again is conjoined to a highly irregular dentate submarginal line Hind wing with oblique antemedial line, a discocellular lunule, a postmedial band from cell to inner margin, with a white line on it, an ill-defined submarginal line, both wings with a fine brown marginal line.

Hab. Sikhim. Exp. 30 millim.

- 3583 Rambara ochreicostalis=R luminaria, Hubn Zutr iv, p. 35, figs. 757, 758, and Zanclopterya zincaria, Guen. Phal. 11, p. 16.
- 3588. Insert (syn) Camptogramma blitzaria, Wlk Cat. xxvi, p 1716; C & S no. 3894.
- Vol III, p. 335 Under Dysethia insert Dysethiodes, Warr. Nov. Zool 1895, p. 106, for Sect I. B
- 3596 a Dysethia longiramus, Hmpsn. Trans Ent Soc 1895, p 312.
- d. Antennæ bipectinated with long branches to three-fourths length Rufous brown. Fore wing slightly suffused with grey, an indistinct diffused dark rufous antemedial line Hind wing paler, with industriect cell-specks; the marginal area of both wings slightly darker. Underside brownish ochreous, fore wing with the costa fulvous; the outer area slightly darker, hind wing with black cell-speck and traces of a postmedial curved line.

Hab. Sikhim. Exp 28 millim.

- 3617 a Eubolia roseicilia, Hmpsn. Trans Ent. Soc 1895, p 312.
- d. Pale yellowish grey irrorated with fuscous, palpi and legs tinged with crimson Fore wing crossed by seven or eight nearly straight indistinct dark lines; a submarginal series of indistinct white spots, the three below apex with crimson on their edges; the cilia crimson Hind wing white, with the cilia crimson Underside of fore wing suffused with fuscous, except the marginal area, hind wing with dark discocollular speck

Hab. Bhután. Exp. 34 millim.

- P 346. Under Phibalapteryx insert Pseudocollia, Warr Nov. Zool, 1895, p. 118.
- P 349. Under Cidaria msert Hysterura, Warr. Nov Zool. 1895, p. 115.
- 3643. Omit cingala, Moore, the species standing as Cidaria multilinea. Ampen.

- 3673 a Cidaria griseiviridis, Hmpsn Trans Ent Soc 1895, p 312
- 6. Antennæ bipectinate, with short stiff branches bearing fascicles of cilin. Head, thorax, and abdomen green and black Fore wing with numerous indistinct waved black lines, the basal area pale rufous and green, the medial area fuscous, with a large patch of grey suffusion on the disk beyond cell bounded by the postmedial line, which is slightly angled at vein 6 and very strongly at vein 4, then highly crenulate to inner margin, a black cell-speck, outer area green, with a large rufous patch on costa beyond the postmedial line, a blackish subapical patch; some rufous streaks on the veins and blackish patches on margin. Hind wing fuscous, with traces of cell-speck and waved lines, which are more distinct on underside

Hab. Bhután Exp 28 millim.

3673 b Cidaria cingala, Moore, Lep Ceyl 111, p 489, pl 207, fig 10. C & S no 3896

Differs from griseiviridis in the male having the branches of antennæ long, hind wing darker fuscous brown.

Hab. Ceylon Exp 24-30 millim

- 3679 a Cidaria plumbeotincta, Swinh A M N H (6) XI, p 297
- d Head and thorax black and leaden grey, abdomen rufous, with some leaden grey on dorsum. Fore wing pale rufous, with the basal, costal, and apical areas black suffused with leaden grey, traces of numerous waved lines, of which some of the postmedial form a rufous and white band on the apical patch. Hind wing fuscous, with the cilia and a patch at anal angle rufous. Underside fuscous irrorated with grey.

Hab Khasis Exp 22 millim.

- 3680. Insert (syn) Coremia buda, Swinh A. M N. H (6) 711, p 297
- 3704 Larentia seriata, Moore, = L affinis, Moore, Lep Ath. p 277 C. & S no 3837, which has precedence
- 3711. Rename Larentia fulvimacula, nom. nov, and omit the locality Sikhim
- 3730 Insert (syn) Amnesicoma simplex, Warr Nov. Zool 1895, p. 113
- 3731. Rename Photoscotosia metachryseis, nom nov, the male sometimes has the white patch
- 3731 a. Photoscotosia obliquisignata, Moore, P Z S 1867, p 657, C \S S no 3823
- Q Differs from metachryseis in being much redder brown Fore wing with the waved lines prominent and not interrupted, the antemedial line slightly angled on median nervure, the postmedial

line not bent outwards beyond lower angle of cell and without white specks on the veins, the discocellular mark elliptical and oblique, no oblique medial patch from costa, the apical streak short, the submarginal line prominent Hind wing with the whole costal area orange

Hab Sikhim. Exp 52 millim.

3740 a Callabraxas trigoniplaga, Hmpsn Trans Ent. Soc. 1895, p 312

o. Fore wing with a tuit of long hair below base of median nervure, hind wing with vein 5 from below middle of discocellulars, which are angled Head black; thorax and abdomen orange, with paired dorsal black spots. Fore wing with the basal area rufous, with indistinct grey lines on it and waved edge, the rest of the wing grey, with a white medial band forked and enclosing a large triangular rufous patch from costa to lower angle of cell, and a small spot on inner margin, a lumulate white submarginal line; the area at outer angle rufous. Hind wing white, with a dark patch at lower angle of cell, some dark marks near middle of inner margin, a dark patch at anal angle, with a waved white line on it. Hab. Nepal Exp. 52 millim.

3752 a Gymnoscelis polyodonta, Swinh A M N H. (6) xvi, p 296

d Head, thorax, and abdomen clothed with black, rufous, and pale scales, wings pale, variegated with red-brown and crossed by very numerous minutely dentate black lines, of which the aute-and postmedial are slightly the most prominent, the latter augled at vein 6 and more prominently at vein 4 of each wing.

Hab Khásis Exp. 26 millim.

3759 C deletarius=3761. Chloroclystis filicata

3759 a Chloroclystis rufinigra, Swinh A M N H. (6) xvi, p. 296

d Pale rufous; the head, collar, 1st segment of abdomen above, and the terminal segments black, wings with traces of numerous waved lines. Fore wing with the basal costal area black, a quadrate black spot in end of cell and another beyond the end, met by some black suffusion irrorated with grey from the apex, postmedial and submarginal series of black specks, the latter with a larger spot at middle. Hind wing with a black mark near base of inner margin, a discocellular lunule, indistinct medial series of specks; a submarginal series and a very large black patch with some white specks on it from anal angle to middle of outer area

Hab Khásis. Exp 22 millim.

3763 a Chloroclystis subtrigalba, Sunnh. A M. N. H. (6) xvi,

J. Pale rufous suffused with grey, head and terminal half of abdomen black. Fore wing with the basal half of costa black

suffused with grey; medial and submarginal black patches on costa; traces of numerous pale waved lines, a few black scales on veins of outer area, a black patch beyond cell, with the indistinct postmedial line curved round it, a submarginal waved grey line, with fuscous patches on it at middle and outer angle. Hind wing with numerous indistinct waved lines, a medial black patch on inner margin and a smaller patch at anal angle. Underside of fore wing fuscous, with indistinct angled postmedial band outlined with whitish; hind wing white, with angled antemedial line and postmedial band.

Hab Khásis. Exp. 16 millim

3767 a Chloroclystis sinuosa, Swinh A M N. H (6) xvi, p 295

3. Pale fuscous suffused with grey. Fore wing with indistinct waved subbasal, antemedial, and medial lines, a prominent black postmedial line highly angled at vein 4. Hind wing with postmedial line excurved below costa and highly excurved between veins 4 and 2, both wings with the marginal area darker fuscous. Hind wing with the outer margin much excised from veins 6 to 4, then crenulate to anal angle.

Hab Khásis. Exp 12-15 millim.

3769 a Chloroclystis acygonia, Swinh A M N H (6) xvi, p 295.

d Fuscous brown, slightly irrorated with black and with a faint rufous tinge. Fore wing with indistinct subbasal and curved antemedial lines; both wings with prominent black white-edged postmedial line, produced to a very acute angle at vein 4, traces of a pale waved submarginal line.

Hab Khásis Exp. 18 millim.

3774 a Chloroclystis nigrilineata, n sp

Grey, with a slight olive-green tinge Fore wing of male with the dilation of costa and fringe of hair slight and placed beyond the middle, a black spot near base of costa; waved black ante-and postmedial lines, the latter angled at vein 4, a minutely dentate whitish submarginal line Hind wing with waved black ante- and postmedial lines, the latter indented at vein 5; a minutely waved whitish submarginal line. Underside with diffused pale fasciae in the interspaces.

Hab Ceylon (Green) Exp 18 millim. Type in B M.

3785 a Eupithecia melanolopha, Swinh A. M N. H (6) xvi, p 296

& Fuscous and pale rufous, abdomen with some white on basal segments Fore wing with the base of costa dark rufous; a large medial subtriangular black patch from costa, embracing the tuft of black scales, postmedial and submarginal slightly sinuous white lines, the former double near inner margin and the latter expanding into a white spot; a small patch of rufous suffusion on costa inside the submarginal line, and the whole area near outer angle dark rufous Hind wing fuscous; medial and submarginal white lines prominent towards inner margin; the inner area irrorated with dark rufous and a prominent spot on inner margin between the two lines

Hab Khásis, Ceylon Exp. 18 millim.

- 3788 a. Eupithecia nigrinotata, Swinh A.M N H (6) xvi, p 298
- o. Pale rufous brown, abdomen with some black at base. Fore wing with large black patches on costa at base, before middle, and one at middle, forming with the large cell-spot a triangular mark, traces of waved lines. Hind wing with some fuscous on base of inner area, a diffused fuscous medial line and a small spot near anal angle.

Hab Khásis Exp. 16 millim.

- 3795 a Eupithecia chlorophora, Swinh A M N. H (6) xvi, p 295.
- d. Head and thorax pale; the palpi collar, and patagia bright green; abdomen grey-brown, with the dorsal tufts and terminal segments fulvous. Fore wing with the base green, with white spots on its outer edge, the rest of the wing brown, several antemedial waved black lines, of which the two outer are angled and filled-in with green below costa, a black cell-spot followed by three waved lines, a sinuous white postmedial line excurved from vein 6 to 3, with some waved lines beyond it and met by a bright green fascia from apex. Hind wing pale fuscous, with traces of tour lines which are more prominent on underside

Hab. Bhután, Khásis Exp 20 millim.

- 3812 a Sauris interruptata = triseriata ? (nec 3) is a distinct species belonging to Sect III. C, but without the tuft on hind tibise
- 3813. Sauris lineosa = 3807, S. norms, and belongs to Sect I
- 3815 Sauris proboscidaria. & without the long abdominal and tibul tufts of hair.

3818 a Hydrelia rufinota, n sp

Grey with a slight blacine tinge Fore wing with traces of numerous waved lines, rufous marks on costa at the medial and postmedial lines, the last with series of dark specks on it, and a rufous and fuscous mark at middle. Hind wing with traces of numerous waved lines on outer half.

Hab Sikhim, 12,000 feet (Dudgeon). Exp 32 millim. Type in B M.

3831 a Hydrelia cingulata, n. sp

Q Head, thorax, and abdomen fuscous irrorated with white Fore wing grey; a curved antemedial dark line followed by a rufous band, a rufous postmedial band with waved dark edges, a submarginal minutely waved rufous band, a series of dark marginal marks. Hind wing whitish; an indistinct sinuous antemedial line, a double waved postmedial line; a submarginal line and a marginal series of specks

Hab Yatong, Sikhim, 10,000 feet (Bingham) Evp 32 millim

Type in B M

SECT IV. Fore wing with the outer margin slightly excurved at middle. Hind wing with it excised below apex.

3831 b Hydrelia crocearia, n sp

d Differs from pictaria in being yellower. Fore wing with no silvery markings, the basal patch short and even, no cell-spot; a lunulate brown patch beyond the cell from below costa to vein 3, two waved submarginal brown lines. Hind wing yellow, whitish at base; antemedial, medial, and two submarginal brown lines.

Hab Yatong, Sikhim, 10,000 feet (Dudgeon) Exp 30 millim.

Type in B M.

3831 c. Hydrelia sanguiflua, n sp

Bright yellow, head, thorax, and abdomen suffused with pink Fore wing suffused with pink and with patches of purple to beyond middle of costa and outer angle; the apical area pink, with a diffused purplish sinuous line on its inner edge. Hind wing with traces of waved antemedial and medial fuscous lines, the outer area with irregular patches of pink and purple.

Hab. Yatong, Sikhim, 10,000 feet (Bingham) Exp 28 millim

Type in B M.

Vol III, p 415 Under Venusia insert Discoloria, Wair Nov. Zool p 105, for Sect II

3848 a. Cambogia phœnicosoma, Swinh A M N H (6) xvi, p 294

Hind wing with veins 3 and 4 well separated at origin

J. Head, thorax, and abdomen grey and pink Fore wing with the base pink, its outer edge much excurved in cell, an antemedial grey-green band with waved edges, a very wide medial pink band with sinuous outer edge, running out to near the margin between veins 5 and 2 and followed by an obscure fuscous line, a black discocellular lunule and indistinct waved postinedial line; a series of black marginal specks. Hind wing pink, the outer area grey-green, the pink area bounded by a sinuous white line angled at vein 4; a black discocellular speck and traces of two medial waved lines

Hab Khásis. Exp 22 millim.

- 3858. Insert (syn.) Craspedia i ufistigma, Warr. Nov Zool. 1895, p. 93
- 3859 Insert (syn) Craspedia eiubescens, Warr. Nov Zool. 1895, p 92. vol. iv. 2 o

- 3860. C opsmaria—Craspedia patularia, Wik. Cat xxxv, p 1633; C & S. no 3944. (See 3883) Sikhim, Nilgiris
 And insert (syn.) Craspedia rufilmea, Warr. Nov. Zool. 1895, p. 92
- 3861. Insert (syn) Craspedia sordida, Warr. Nov Zool. 1895, p 93.

3883. Omit from synonymy Acidalia patularia, Wlk.

3907 a. Acidalia ptyonopoda, Hmpsn Trans Ent Soc. 1895, p 818

o. Mid tabue fringed with long pink hair, especially towards extremity; hind tibue dilated, with a fold and immensely developed tuft of pink hair, but with no tuft from extremity and without spurs.

Pale ochreous; head black, the wings with black cell-specks, two indistinct waved antemedial lines, two postmedial and one

submarginal

Hab Bhután Exp. 20 millim.

3909 a. Acidalia phœnicoptera, n sp

3. Hind tibize and tarsi very much thickened, flattened, and spirally twisted, the joints invisible, hind wing elongate triangular, the snal two-thirds of outer margin being folded over on underside.

Head and thorax greenish-ochreous; abdomen suffused with purple-red above. Fore wing purple-red, the basal half of costal area ochreous, with a few red scales, waved antemedial, medial, and submarginal ochreous bands Hind wing with straight oblique antemedial ochreous band and waved postmedial band

Hab. Ceylon (Green). Exp. 16 millim Type in B M

3911 a. Acidalia gemmaria, n sp

- Q. Frons dark brown, vertex of head chestnut, thorax ohve; abdomen chestnut. Fore wing olive, with shining scales and a few black specks; a bright red submarginal band from vein 5 angled outwards on vein 3, then bent inwards and filled-in with bright purple towards inner margin. Hind wing with bright red discoccilular spot and curved postmedial line, followed by a broad bright purple band with minutely waved outer edge; some grey suffusion on margin.
 - Hab. Puttalam, Ceylon (Pols). Exp. 18 millim Type in B M.
- 3923 a. Chrysocraspeda phœnicozona, Hmpsn. Trans Ent Soc 1895, p 318
- of. Antennæ minutely chated; hind tibue short and thick, with tufts of short hair from extremity, the tarsus curved and apparently unjointed, with thick tufts of hair from inner side. Fore wing with veins 3, 4 stalked; hind wing with the underside entirely clothed with rough hair and with the inner margin, fringed with long hair.

Head and thorax olive-grey, the frons and collar dark purple; abdomen grey tanged with purple. Fore wing olive-grey, with some purple specks on costa; the basal half with numerous

indistinct waved purple bands and lines not reaching the costa, a broad purple marginal band sending a point inwards on vein 5 and with some grey on it at apex. Hind wing olive-grey, almost entirely covered by ill-defined waved purple bands.

Hab. Sikhim, Khásis Exp 20 millim.

- 3924 Ephyra invexata=E (Thalera) albannularia, Wth Cat. xxii, p 554, C & S. no. 3474—which has precedence
- 3926 Omit from synonymy Anisodes pallida, Moore
- 3932 A intermixtaria = Anisodes pallida, Moore, Lep. Ceyl. in, p. 445, pl 201, fig 11; C & S no 3575—The Khási form intermixtaria has the dentate fuscous lines more prominent than in the smaller Southern form.

Hab Khásis, Nilgiris, Ceylon, Borneo Exp. 26-30 millim.

- Vol. III, p 452 Under Erythrolophus insert Craspediopsis, Warr. Nov Zool 1895, p 93, for Sect II B.
- 3953 Insert (syn) Craspediopsis bimaculata, Warr. Nov. Zool. 1895, p 94
- 3957 a Rhodostrophia semipurpurascens, n sp

Antennæ of male minutely serrate and fasciculate.

d Rufous; head with the vertex white, thorax purplish. Fore wing with the basal two-thirds purplish fuscous, with fine pale strike and sinuous outer edge, a waved postmedial purplish line angled outwards below apex and with an oblique mark from its angle to outer margin, the median nervules and outer angle purplish. Hind wing redder, with traces of sinuous ante- and postmedial dark lines, a black cell-speck, short purplish streak at anal angle, and a marginal line.

Hab. Bhután, 6000 feet (Dudgeon) Exp. 26 millim. Type in

B. M

- 3958. Insert (syn) Rhodostrophia curvata, Warr. Nov. Zool. 1895, p 98
- 3964 Insert (syn) Rhodostrophia olivacea, Warr. Nov. Zool 1895, p 99.
- 3966. Insert (syn) Rhodostrophia bicolor, Warr. Nov. Zool. 1895, p 98

The form bicolor has the band of fore wing bright pink in male, the whole fore wing suffused with pink in female; hind wing with the ground-colour pale yellow —Kashmir.

- Vol. III, p. 458 Under Timaadra insert Gnamptoloma, Warr. Nov Zool 1895, p 95, for Sect II
- 3973. Timandra mundissima=T. (Thalassodes) chlorozonaria, Wlk.
 Cat xxii, p 554; C. & S. no. 3452—which has precedence
 2 0 2

3995 a Euschema flavidiscalis, Wan Nov Zool. 1895, p 86.

d. Head black and white, collar yellow, thorax purple and white, abdomen yellow. Fore wing deep purple, with pale blue patch in cell met by an oblique fascia from base of inner margin, a curved medial series of three blue patches merging into a white patch on inner margin, a discocellular band, an oblique series of quadrate blue spots, the two between veins 3 and 5 displaced towards the margin. Hind wing golden yellow, with an oblique basal purplish band, a white medial costal patch, a discocellular purple patch; the apical area purple, with pale blue spots beyond upper angle of cell and four submarginal lumiles, a postmedial purple band from vein 3 to inner margin; a submarginal series of purple spots from vein 4 to anal angle.

Hab. Burma Enp 80 millim

4029 a Pseudotei pna hypoglauca, *Hmpsn Trans Bnt. Soc.* 1895, p 313

Olive-yellow, thickly irrorated and striated with fuscous. Fore wing with traces of waved ante- and postmedial lines with black specks on the veins, the former with an obscure rufous patch inside it on inner area, the latter bent inwards at vein 2 and with obscure rufous patches beyond it, traces of a submarginal series of specks and more prominent marginal series. Hind wing with obscure discocellular mark, traces of a waved postmedial line with black specks on the veins and obscure rufous patches beyond it, a marginal series of black specks. Underside grey, thickly irrorated with fuscous and with prominent black cell-spots

Hab. Dalhousie Exp 60 millim.

4039 Insert (syn) Thalassodes fimbriaria, Wlk. Char. Undescr. Het p. 97; C. & S. no 3456

4047 a. Agathia gigantea, Bull A. M N H (5) vi, p 217.
Agathia diversiforms, Warr Nov Zool 1894, p 388

Differs from codina in the green area of the fore wing sending a tooth into the postmedial band, which is much browner, between veins 3 and 4. Hind wing with brown patch on middle of inner margin, the inner edge of the postmedial brown area dentate from costa to vein 3, with no white beyond it on costa, and only a little green inside the margin, rather wider at apex. Underside with fuscous inner edge to the postmedial striated area, widening to costa of each wing and angled at vein 4 of fore wing.

Hab. Sikhim, Assam; Sumatra; Java Exp 54 millim.

4059. Omit Thalassodes leucospilota, Moore, Lep Ceyl. ni, p 427, pl. 194, fig. 4, C & S no 3461; and the word 'leucospilota' after Ceylon form (See 4107)

And insert Thalara costipunctata, Moore, Lep Ceyl. ni, p 428, pl. 195, fig 4; C & S no 3477. (See 4134.)

4059 a Hemithea alboundulata, Von Hedeman, Hor Ent Ross xiv, p 511, pl 3, fig 8

Differs from tritonaria in being blue-green. Fore wing with slight dark cell-speck, both wings without the dark marginal line, the white specks slight, the cilia green

Hab. Amur; China, Khasis Exp 32 millim.

Genus AFRENA

Afrens, Hmpsn Trans Ent Soc 1895, p 314

Type, A esmeralda, Hmpsn Range Assam, Tenasserim

Palpi porrect, the 2nd joint reaching well beyond the frons and thickly scaled, the 3rd long, frons smooth; antennæ of male bipectinated with short branches for two-thirds length, abdomen without dorsal tufts, hind tibiæ with two pairs of spurs. Fore wing somewhat acute at apex, vein 3 from angle of cell, 6, 7, 8, 9, 10, 11 stalked. Hind wing with the frenulum absent in female, the outer margin angled at vein 4, veins 3, 4 from lower angle of cell, 4, 5 from upper angle

4070 a Afrena esmeralda, Hmpsn Trans Ent Soc 1895, p 314

Brilliant emerald-green, palpi black and grey, antennæ ochreous. Fore wing with the costa whitish speckled with black, an indistinct slightly oblique yellowish-green antemedial line, two

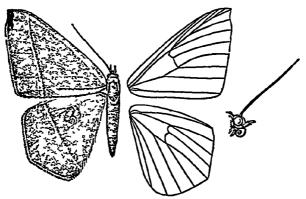


Fig 287 — Afrena esmeralda, Q

brown specks on discocellulars; a straight oblique pale postmedial line with yellowish-green inner edge, a chestnut apical patch Hind wing with a pale chestnut patch at end of cell on which the discocellulars show as a dark bracket-shaped mark; a pale postmedial straight line with yellowish-green inner edge, cilia of both wings white at tips Underside suffused with white

Hab. Khásis, Tenasserim Exp. 62 millim

Vol III, p. 498. Omit "Sect I" &c. to "angle of cell"

4080 a. Euchloris rectifasciata, n sp

Head orange fulvous, fore legs crimson in front, thorax and abdomen whitish, wings yellow-green. Fore wing with the costs white; a straight somewhat oblique postmedial white band, a marginal white band. Hind wing with straight white band just beyond the middle and a marginal band, underside white

Hab Puttalam, Ceylon (Pole) Exp, & 14, 9 20 millim

Type in B M

Vol III p 500 Transfer nos 4085-89—E. pyrrhogona, subtiliaria, signifeia, ovifera, and efformata—to Eucrostes, p 504, in which genus the first two will form Sect II, primarily distinguished by the length of palpi, the last three being typical.

4107 T albomaculata=Thalassodes leucospilota, Moore, Lep Ceyl. ni, p 427, pl 194, fig 4; C & S no 3461

4115 a Thalassodes nightfrons, n sp

J. Yellow-green with slight grey suffusion, palpi, a line behind the eyes, vertex of head, and shafts of antenna white, from black-brown, fore wing with the costa ochreous speckled with black, both wings with traces of waved green ante- and postmedial lines Underside whitish

Hab. Puttalam, Ceylon (Pole) Eap 32 millim Type in B M.

4134. Omit from synonymy Thaler a costrpunciata, Moore

PYRALIDÆ

- 4335 Heter ographis unipunctella=4331 H suboblitella.
- 4436 Paronthaga euryptera=Arnatula melanophia, Sigr Isis.
 v, pl m, fig 22, & vi, p. 78, Siberia, which takes precedence
 for both genus and species
- 46 19 Cataclysta mesorphna = 4651 C blandialis

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